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ABSTRACT

This monograph reports the results of a survey of the economic impact on state and local economies of the 194 member institutions of the National Association of State Universities and Land-Grant Colleges. Analysis of responses (from 111 institutions) is reported in text and graphs. An introductory section notes that the recent emphasis on cutting costs in public higher education make it important to demonstrate that these institutions are powerful engines for state economic growth. Major findings include the following: these institutions generate a median average return of $4 for every state tax dollar invested and generate a median average of 1.6 jobs for every college or university job held; spending by university employees, students, and visitors has a significant effect on state and local economies; these institutions also generate about $19 million a year in tax revenues for the states; they foster new business, create long-term job growth, promote innovation, enhance the work force, improve the quality of life, and foster public service. Summaries of answers to the survey questions are also provided. The remainder of the document presents evidence of the positive economic impact of each responding institution. Summaries are grouped by area of the country: the West, the Midwest, the Northeast, and the Southeast. An index of participating institutions is included. (DB)

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The Economic Impact of Public Universities

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National Association of State Universities and Land-Grant Colleges

December 1997

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Value Added

The Economic Impact of Public Universities

National Association of State Universities and Land-Grant Colleges

Office of Public Affairs
December 1997

The summaries in this report of the economic impacts of individual universities and university systems are based on information supplied by the institutions themselves. To obtain the data, NASULGC contacted several offices at each member university and made a number of requests for reports, data, articles, or other information on economic impact. We also asked each member institution to respond to a NASULGC survey. We made every effort to be comprehensive and complete, but apologize for any information that was inadvertently left out or misinterpreted.

In general, the facts and figures used in the summaries published here come from the NASULGC questionnaires as well as from the other economic data provided to NASULGC. As a service to readers who want more complete information, we have listed at the end of an institution's entry the name of the individual economic impact report a member university made available. For copies of these reports, or for additional information about economic impact, please contact the university or university system directly.

For additional copies, please send e-mail requests to pubs@nasulgc.nche.edu

Please indicate your name, title, and complete mailing address with your request.

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America's state universities and land-grant colleges have always provided critically important benefits both to states that fund them and to the nation as a whole. Some of the benefits—lives ennobled by exposure to the arts, improvements to society made by people using what they've learned, current applications of a research breakthrough made ten years ago, etc.—are intangible and hard to express in dollars and cents. Others, however, show quite clearly that public higher education is an invaluable investment that returns a very high yield on every state dollar spent.

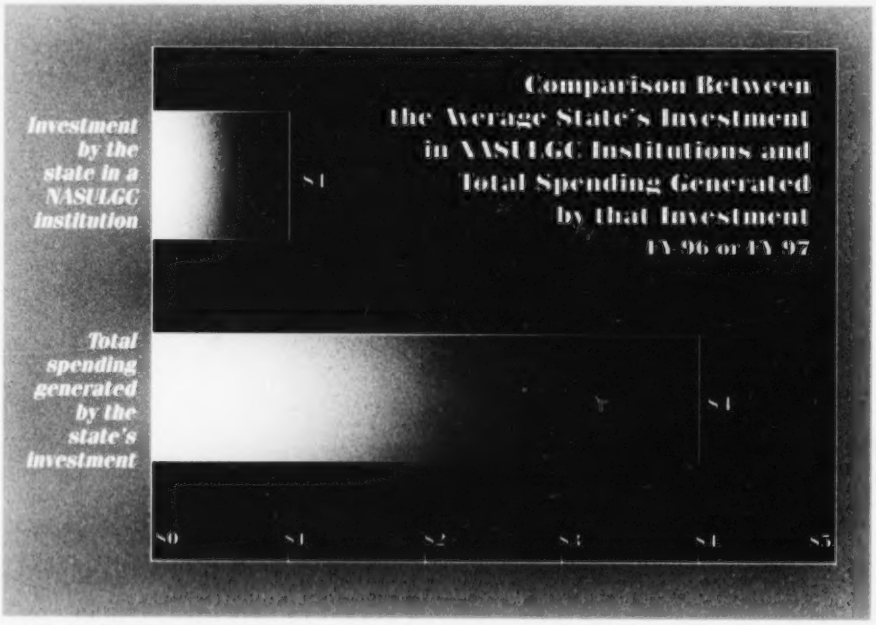
Costs *and* Benefits

Unfortunately, during the last decade, parents, legislators, and governors often have overlooked these benefits in the face of rising tuition bills and the need to cut state spending. Instead, all too often, the spotlight has focused on the costs of public higher education.

State universities and land-grant colleges have responded. First, they have instituted reforms and made painful budget and personnel cuts to reduce costs and slow tuition increases significantly. Thanks to these efforts, the rise in tuition has dropped steadily in recent years. This slowdown is especially impressive because it has taken place at a time when state legislatures have been slashing support for higher education, forcing universities to rely more heavily on tuition and other sources of revenue.

Moreover, state universities and land-grant colleges have renewed their efforts to provide state officials, parents, and taxpayers a full picture of the costs *and* benefits of higher education. To do so, many have gathered and made available information about how each dollar invested in institutions of public higher education impacts the economies of local communities, regions, and states.

Figure 1



Note: Although the large majority of the data provided by institutions was for FY 96 or FY 97, some information pertained to FY 93, FY 94, or FY 95.

Source: National Association of State Universities and Land-Grant Colleges, Economic Impact Survey, 1997.

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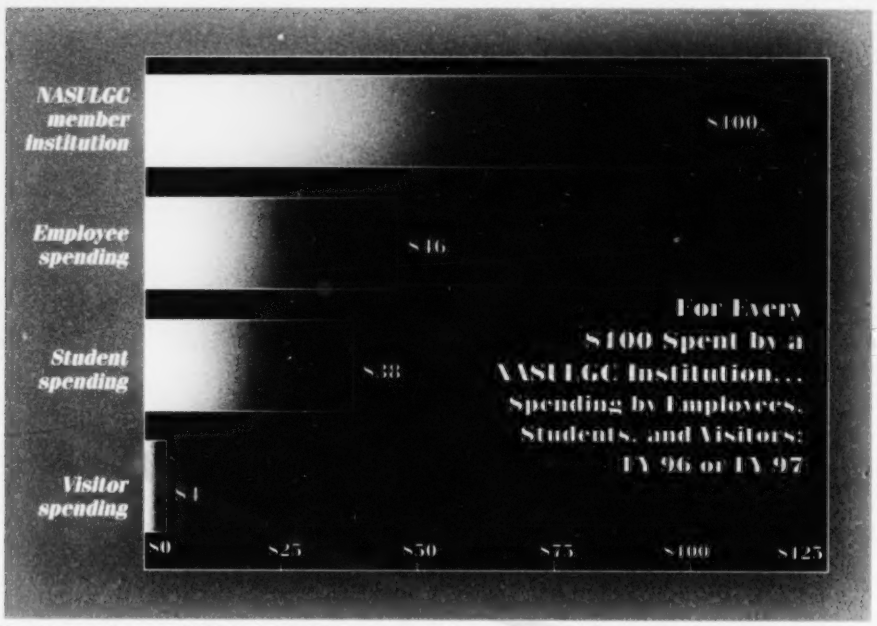
The Economic Impact of Higher Education

In 1996, NASULGC published a first report, *For Every Dollar Invested. . . The Economic Impact of Public Universities,* which brought together some of the information state and land-grant universities have collected in what often are called economic impact statements. That report provided a snapshot of key findings by public universities and an overview of how different institutions are attempting to determine their economic impact.

Value Added—The Economic Impact of Public Universities moves the discussion of the economic impact of public higher education an important step further. In spring 1997, NASULGC sent a questionnaire to every one of its 194 member institutions asking for data concerning each university's economic impact on its state and local economy. We also asked each university to send us its most recent economic impact study, if the university had prepared one. *Value Added—The Economic Impact of Public Universities* includes both an analysis of the survey results (below) and a summary of each responding institution's economic impact (pp. 17–55).

Figure 2



Note: To read, for every $100 spent by NASULGC institutions, an additional $46 was spent by employees, and additional $38 was spent by students, and visitors spent another $4. Although the large majority of the data provided by the institutions was for FY 96 or FY 97, some information pertained to FY 93, FY 94, or FY 95.

Source: National Association of State Universities and Land-Grant Colleges, Economic Impact Survey, 1997.

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Survey Results

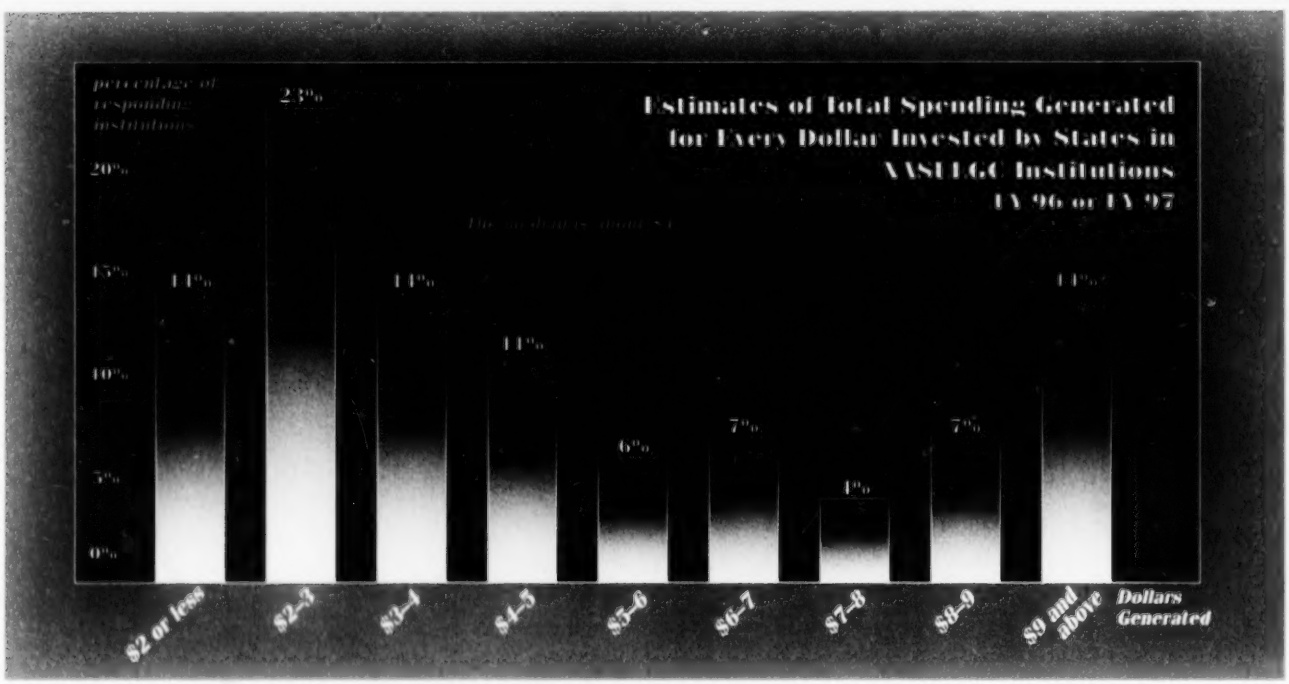
Universities Are a Powerful Engine for Economic Growth

The response to the survey was impressive and the results dramatic. More than two-thirds of NASULGC's members responded. The data they provided clearly indicate that ***state and land-grant universities are a powerful engine for economic growth.***

1. State and land-grant institutions multiply the effect of tax dollars, generating a median average return of $4 for every state tax dollar invested. (See figure 3)

2. State and land-grant colleges and universities are a major source of jobs, generating a median average of 1.6 jobs in the community or state for every single public college or university job held.

Figure 3



Note: To read, the average amount generated for every $1 invested by the state in the institutions responding to the NASULGC survey was $4. Although the large majority of the data provided by the institutions was for FY 96 or FY 97, some information pertained to FY 93, FY 94, or FY 95. The categories should read, for example, $2.01–$3.00.

Source: National Association of State Universities and Land-Grant Colleges, Economic Impact Survey, 1997.

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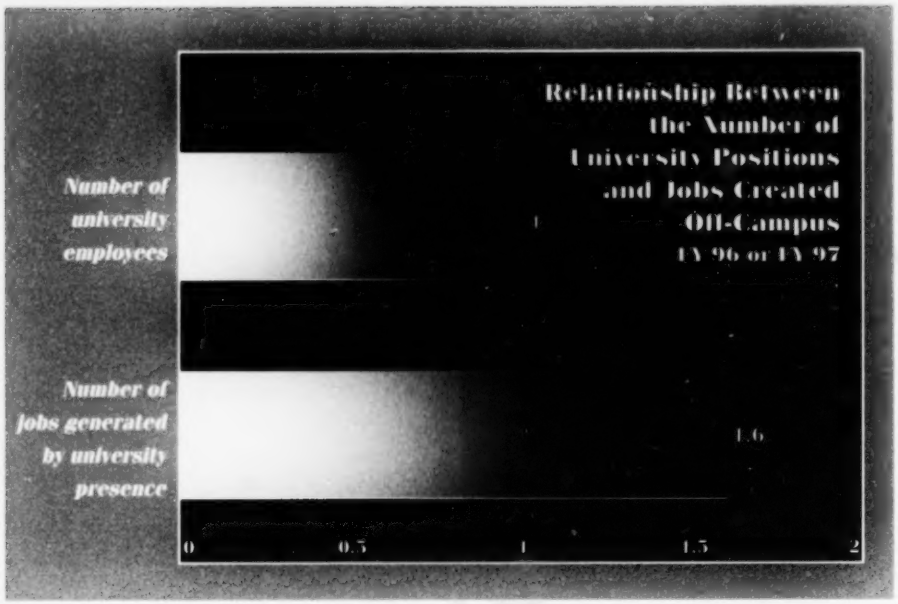
Figure 1



Note: To read, for every job at a NASULGC member institution, approximately 1.6 jobs are created in the community or state. Although the large majority of the data provided by the institutions was for FY 96 or FY 97, some information pertained to FY 93, FY 94, or FY 95.

Source: National Association of State Universities and Land-Grant Colleges, Economic Impact Survey, 1997.

3. Spending by university employees, students, and visitors has a significant effect on local and state economies. The median spending by university employees is about $128 million a year; students spend $106 million; and visitors add another $11 million. In other words, for every $100 spent by NASULGC institutions, employees spent an additional $46, students spent $38, and visitors spent an additional $4. (See figure 8)

4. State and land-grant institutions also generate about $19 million a year in tax revenue for the states.

As impressive as these findings are, they tell only part of the story of the economic impact of state universities and land-grant colleges. The individual economic impact statements supplied to NASULGC (see summaries pp. 17–55) show a range of additional positive results, including:

5. Fostering new business and creating long-term job growth.

EXAMPLE: Hundreds of good business ideas come through North Dakota State University's Institute for Business and Industry Development each year. NDSU experts help entrepreneurs figure feasibility or troubleshoot new processes. Many ideas relate to agricultural and general manufacturing. Other potential businesses are from the service industries.

6. Promoting innovation.

EXAMPLE: Over the past decade, the Purdue University Technical Assistance program has provided university expertise to more than 1,850 Indiana businesses.

7. Enhancing the work force.

EXAMPLE: Because of the added earning power graduates have thanks to a university degree, University of Massachusetts alumni add at least $2 billion to the state's economy every year.

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8. Improving the quality of life.

EXAMPLE: Working with California farmers, University of California, Santa Cruz researchers have been at the forefront of sustainable agriculture for years.

9. Public service.

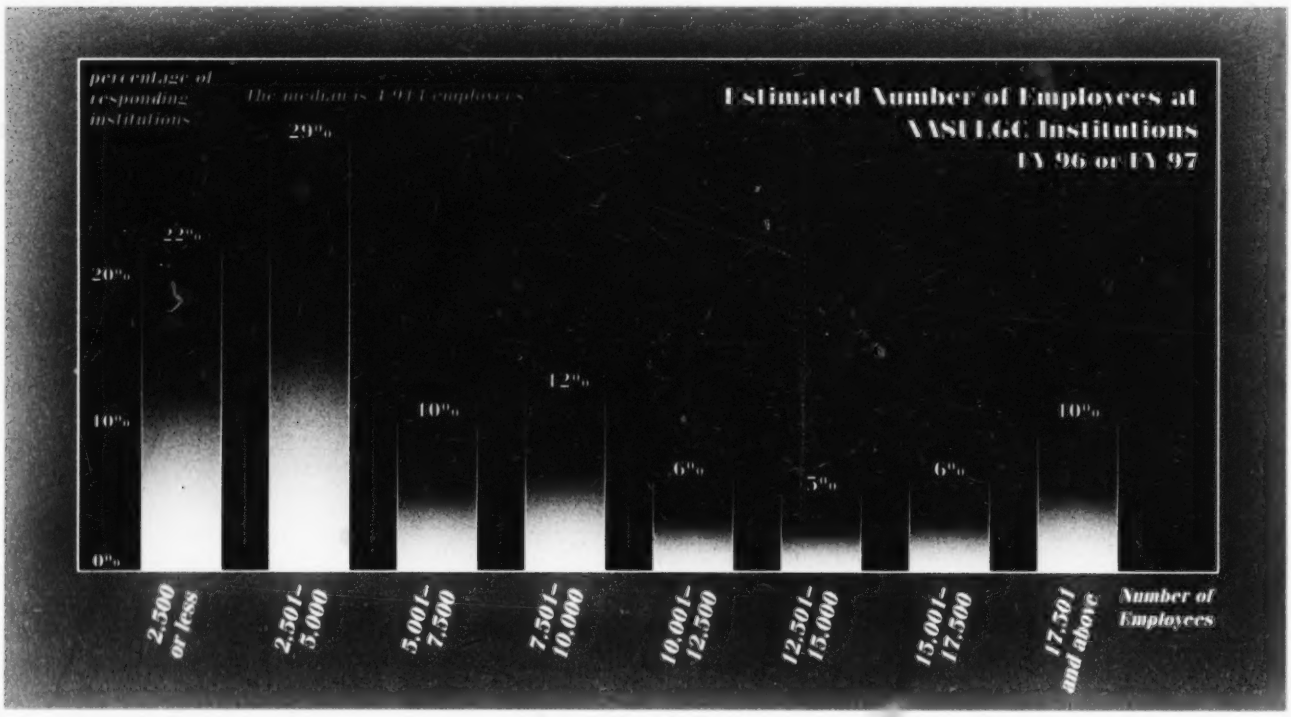
EXAMPLE: University of Arkansas social work students and faculty are helping to improve the quality of the state's child welfare resources.

NASULGC's National Survey

NASULGC received useable questionnaires from 111 member institutions, an outstanding response rate of more than 66 percent. (Note: the survey analysis presented here does not include NASULGC member systems.) The responses also reflected a broad geographic distribution of NASULGC members—questionnaires were received from 90 percent of the states. The high response rate illustrates the fact that more and more universities want the public to understand the economic benefits they provide.

NASULGC's analysis of these responses yielded the most comprehensive study to date of the economic impact of public universities on their states and localities. Some caveats are in order, however. Although 70 percent of the respondents provided data from FY 96 or FY 97, 30 percent of the institutions supplied information from FY 95 or earlier. Therefore, the medians listed in the findings should

Figure 5



Note: Although the large majority of the data provided by the institutions was for FY 96 or FY 97, some information pertained to FY 93, FY 94, or FY 95.

Source: National Association of State Universities and Land-Grant Colleges, Economic Impact Survey, 1997.

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be considered to be conservative. It is likely that the values would have been higher for many questions if all the data had reflected FY 97 information.

Medians, rather than modes or means, were chosen as the most appropriate measure because the range of responses was often quite broad. Where the range is broad, the median value that would occur at the 50th percentile provides the best indication of key trends.

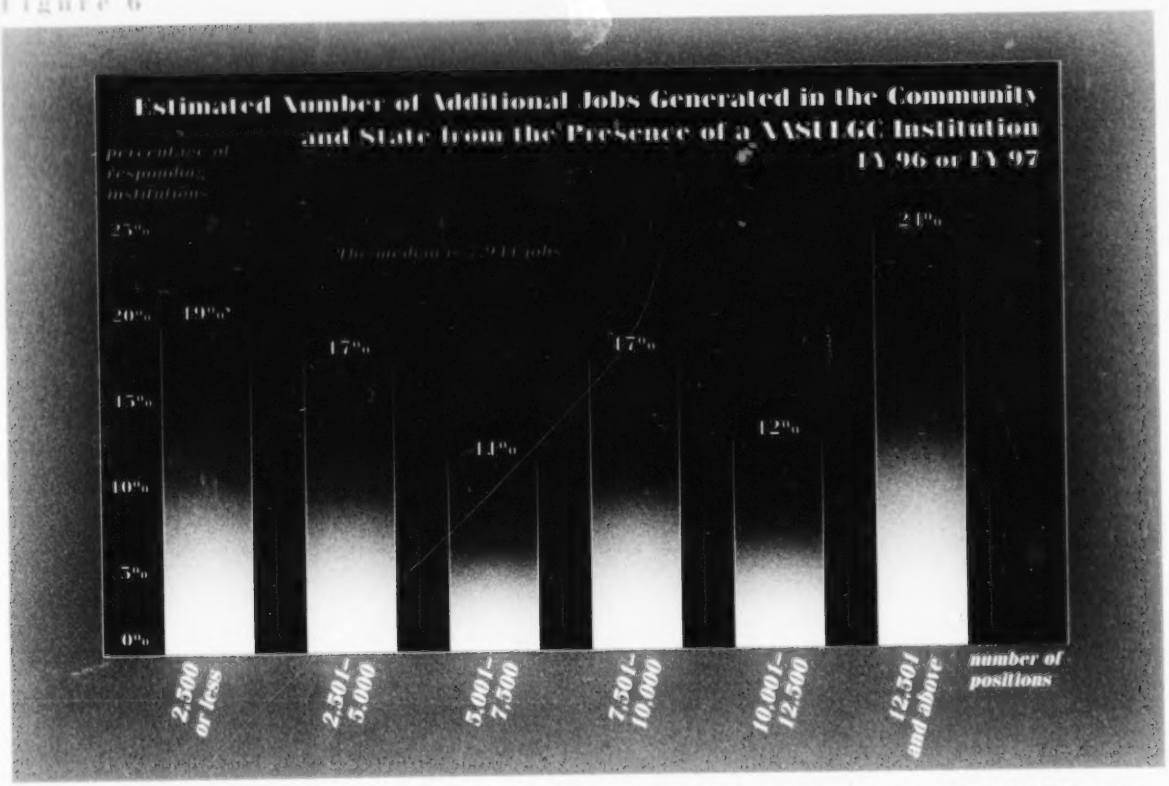
Finally, while the survey findings and the detailed information about each university provided in the body of this report are important, the survey does not attempt to be a complete picture of the national economic impact of state colleges and land-grant universities. Universities take somewhat different approaches to developing economic impact information, and they make new data available regularly. Some clear impressions emerge from the survey and reports from individual universities, but there is still much research to be done.

Survey Results

Question 1. *For every $1 your state invests in your institution, how much total spending is generated in your state's economy?*

Finding: *State and land-grant institutions multiply the effect of state dollars, generating impressive economic returns to the state. The median average return on every $1 invested was $4 (see Figure 2).*

Figure 6



Note: Although the large majority of the data provided by the institutions was for FY 96 or FY 97, some information pertained to FY 93, FY 94, or FY 95.

Source: National Association of State Universities and Land-Grant Colleges, Economic Impact Survey, 1997.

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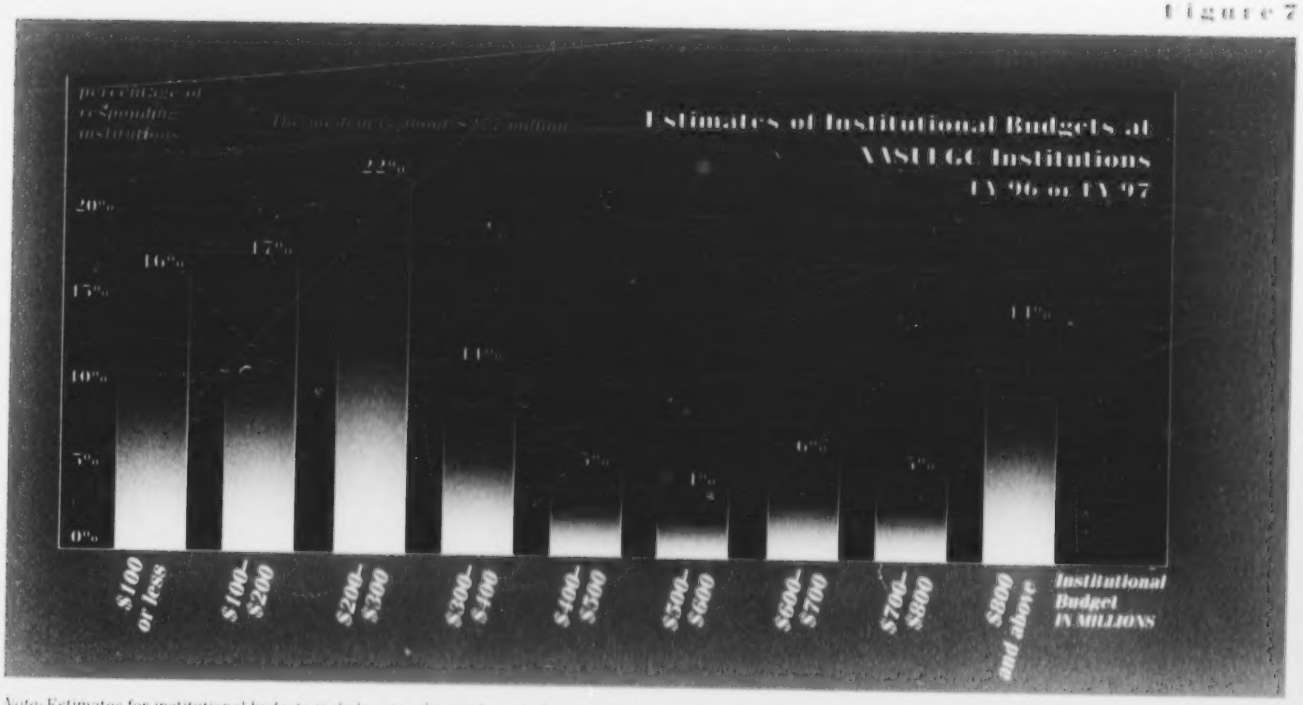
figure 7



Note: Estimates for institutional budgets include expenditures for supplies, materials, equipment, acquisitions, maintenance, etc., as well as capital improvements, such as spending on construction and rehabilitation. Although the large majority of the data provided by the institutions was for FY 96 or FY 97, some information pertained to FY 93, FY 94, or FY 95. The categories should read, for example, $100,000,001–$200,000,000.

Source: National Association of State Universities and Land-Grant Colleges, Economic Impact Survey, 1997.

The range of responses to this question was fairly large, from $1 to $12. The large majority (about two-thirds) of the cases fell between $2 and $8. Moreover, because most of the responses to this question were very specific ($3.23, for example), it appears that respondents provided answers from previous economic impact studies conducted by their institutions.

Question 2. *Please estimate the number of jobs held by university employees and the additional jobs created by the university presence.*

Finding: *Colleges and universities are a major source of jobs. It appears that about 1.6 jobs in the community or state are generated for every one college or university job held (see Figure 11).*

The median average number of employees at NASULGC institutions was 4,914; about two-thirds of the respondents reported that the employees numbered between 2,501 and 17,500 (See figure 9). Although the response rate to this question was quite high, there did appear to be some confusion about whether respondents were to include the number of part-time student employees on campus in their total employee figure. This confusion may have contributed to the 10 percent of cases reporting very high employee totals (over 17,500 personnel).

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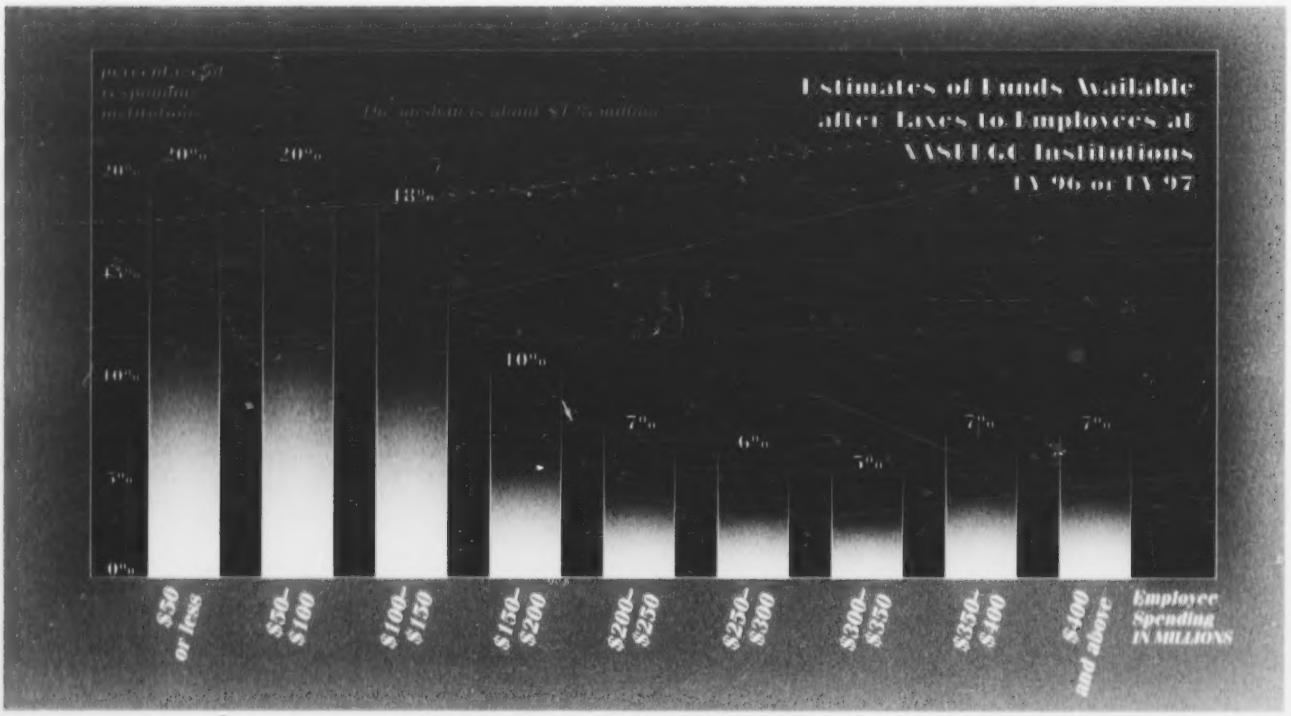
Figure 8



Note: These estimates exclude taxes and other deductions. Although the large majority of the data provided by the institutions was for FY 96 or FY 97, some information pertained to FY 93, FY 94, or FY 95. The categories should read, for example, $50,000,001–$100,000,000.

Source: National Association of State Universities and Land-Grant Colleges, Economic Impact Survey, 1997.

The median number of jobs created by the university presence was 7,941 (see Figure 10).

Question 3a. *Please estimate expenditures for your institutional budget. This includes spending on supplies, materials, equipment, acquisitions, maintenance, etc. as well as capital improvements, such as spending on construction and rehabilitation.*

Finding: *The median institutional budget averaged $277 million (see Figure 4).*

About two-thirds of the cases fell between $100 million and $700 million. The response rate for this question was very strong and answers were very specific. Almost all of the responses pertained to FY 96 or FY 97 data.

Question 3b. *Please estimate expenditures of your employees. This includes the amount of money university employees had available to spend after taxes and other deductions.*

Finding: *The median expenditures by employees was estimated to be $128 million (see Figure 5).*

About two-thirds of the institutions reported figures between $50 million and $350 million.

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Question 3c. *Please estimate expenditures of your students. This includes expenditures for off-campus housing, food, transportation, books, clothing, laundry, and other living expenses.*

Finding: *The median average spent by students at NASULGC institutions was $106 million (see Figure 6).*

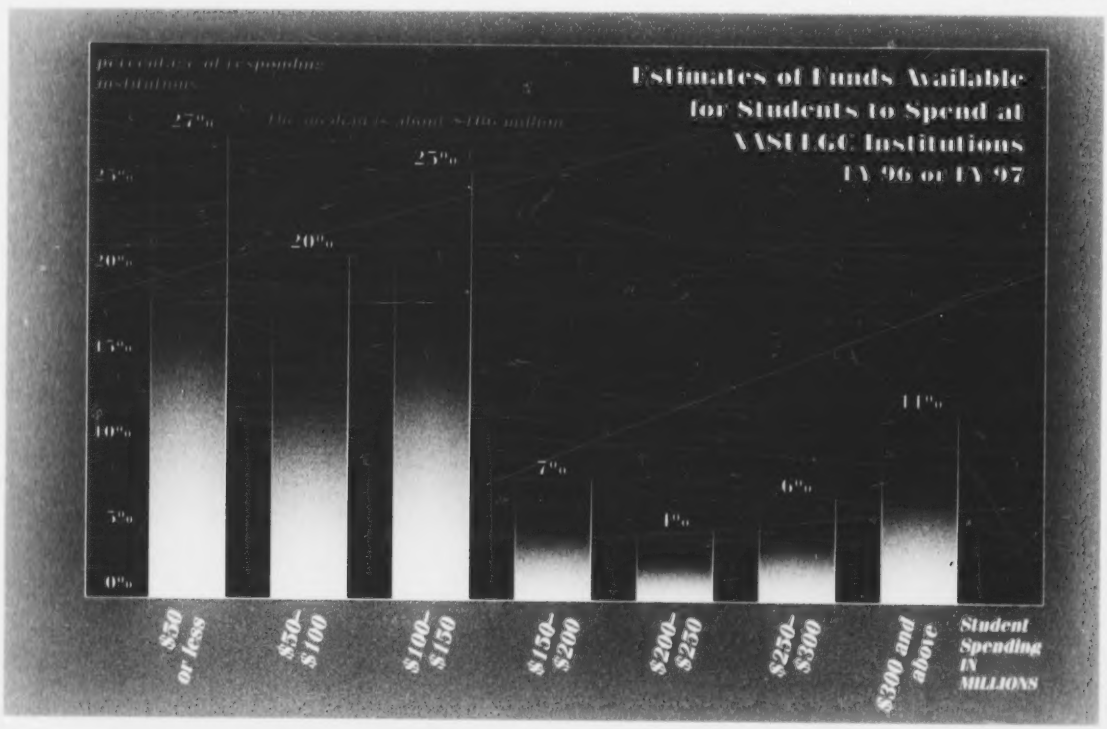
Almost two-thirds of the institutions reported student spending between $50 million and $300 million.

Question 3d. *Please estimate expenditures of your visitors. This estimate includes the money spent by parents and others who visited the campus for athletic events, conferences, commencements, or other special occasions.*

Finding: *The annual median average amount spent by visitors was $11 million (see Figure 7), and the large majority of institutions (almost two-thirds) reported that their visitors spent less than $20 million per year.*

The response rate to this question was lower than most.

Figure 9



Note: These estimates include expenditures for off-campus housing, food, transportation, books, clothing, laundry, and other living expenses. Although the large majority of the data provided by the institutions was for FY 96 or FY 97, some information pertained to FY 93, FY 94, or FY 95. The categories should read, for example, $50,000,001–$100,000,000.

Source: National Association of State Universities and Land-Grant Colleges, Economic Impact Survey, 1997.

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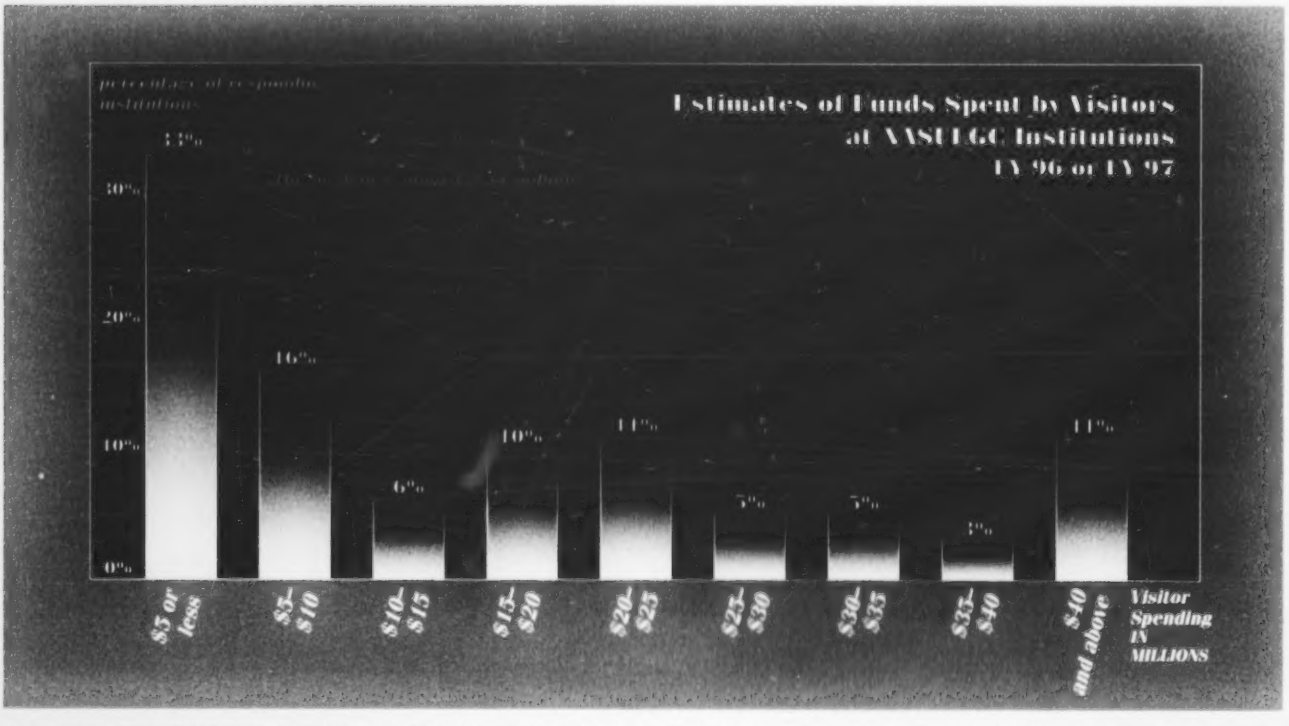
Question 4. *What is the estimated tax revenue generated by your university? This figure should be the estimate of state and local taxes paid by the university's employees, students, and visitors.*

Finding: *The median average tax revenue generated by university employees, students, and visitors is about $19 million (see Figure 12).*

Some caution is in order about these findings because the response rate to this question was quite low; only about one-third of the surveyed institutions supplied data for this question. In addition, those respondents who did supply information were not always consistent. For example, some administrators included estimates of taxes paid by their alumni while others included only estimates of local taxes paid by employees. The range of responses was also quite large due to the discrepancies in the definitions of what the respondents thought was appropriate to include.

Questions 5–6. *In the past five years, have you conducted a study of how your graduates are performing in private industries, the government, and the non-profit sector? If you have conducted a performance study of your graduates, did you revise your curriculum to strengthen any of the following areas: communication skills, analytical skills, technical skills, cooperative education programs with businesses or any other changes?*

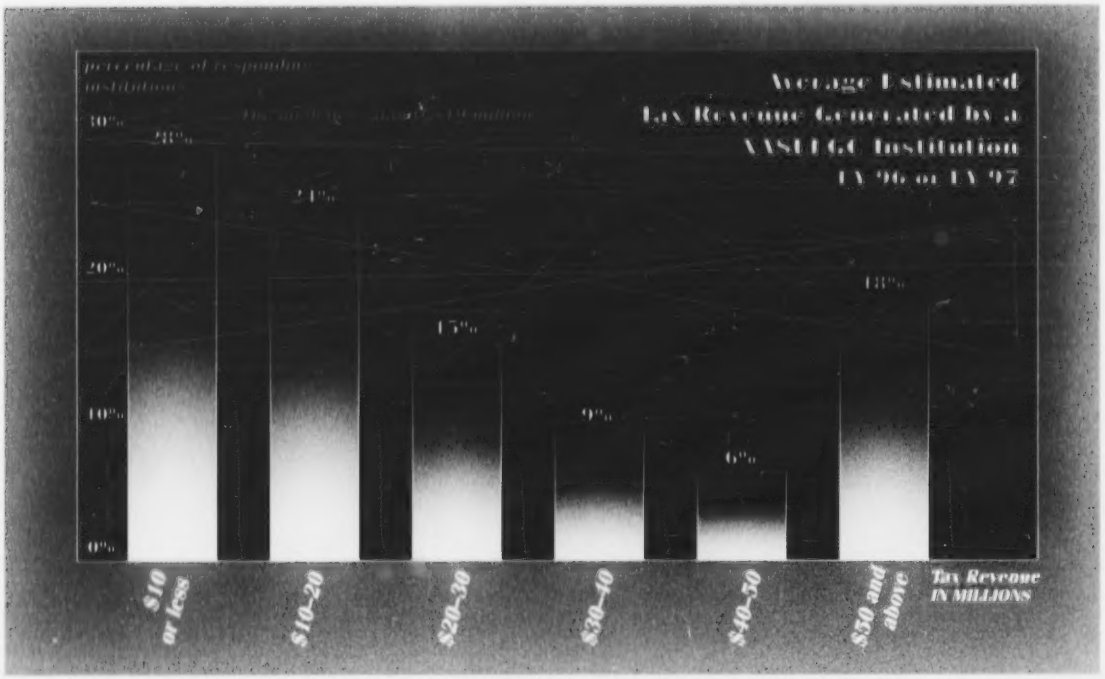
Figure 10



Note: This estimate includes money spent by parents and others who visited the campus for athletic events, conferences, commencements, or other special occasions. Although the large majority of the data provided by the institutions was for FY 96 or FY 97, some information pertained to FY 93, FY 94, or FY 95. The categories should read, for example, $50,000,001–$100,000,000.

Source: National Association of State Universities and Land-Grant Colleges, Economic Impact Survey, 1997.

Figure 11



Note: This is the estimate of state and local taxes paid by the university's employees, students, and visitors. Although the large majority of the data provided by the institutions was for FY 96 or FY 97, some information pertained to FY 93, FY 94, or FY 95. The categories should read, for example, $10,000,001–$20,000,000.

Source: National Association of State Universities and Land-Grant Colleges, Economic Impact Survey, 1997.

Finding: *About one in four of the NASULGC respondents had surveyed their graduates to see how they were performing (see Figure 13). About half of the institutions that had conducted these follow-up surveys had modified their curriculum to emphasize more communication, analytical or technical skills or to improve their cooperative education programs.*

Some specific comments from the NASULGC respondents included the following examples of curriculum revisions:

- changes to general education requirements;
- changes to improve team skills, leadership skills, and business/economic aspects of tech-based industry;
- efforts to strengthen the computer skills of undergraduates;
- beginning of a mandatory freshman community service program;
- replacement of a thirty-year-old general studies program with a core curriculum;
- addition of international concentration to the undergraduate business program.

Conclusion

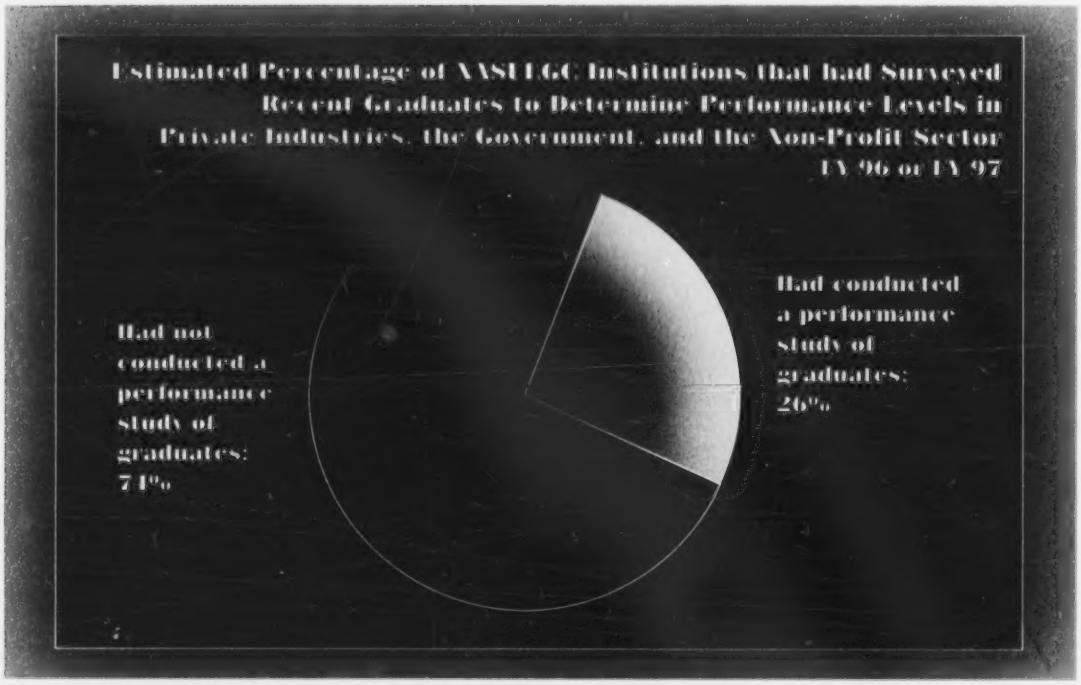
These survey findings and the summary reports on individual universities that follow clearly indicate that state and land-grant universities are a critically important source for economic growth. Across the nation, they generate jobs, help create and grow business, yield large tax revenues, produce research breakthroughs that spur new industries, and multiply state funds many times over to stimulate regional and state economic activity.

At a time when the public is concerned about the costs of higher education, these economic dividends make spending on higher education an extraordinarily productive investment in the future.

■ ■ ■

The facts included in this publication were selected by NASULGC staff and represent only a small sample of the variety of information on economic impact provided by indivitual universities.

Figure 12


Estimated Percentage of NASULGC Institutions that had Surveyed Recent Graduates to Determine Performance Levels in Private Industries, the Government, and the Non-Profit Sector FY 96 or FY 97
Had not conducted a performance study of graduates: 74%
Had conducted a performance study of graduates: 26%

Note: Although the large majority of the data provided by the institutions was for FY 96 or FY 97, some information pertained to FY 93, FY 94, or FY 95.

Source: National Association of State Universities and Land-Grant Colleges, Economic Impact Survey, 1997.

The West

University of Alaska Fairbanks

- The university spent $268 million in FY 97 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- UAF employees spent $115 million in the local economy.
- Students spent $35 million.
- Visitors added another $1 million.
- The university employs 2,250 people.
- UAF creates an additional 1,000 jobs in the state through its spending.

LONG-TERM IMPACTS

- For every state dollar UAF receives for its research operation, it generates another $4 through federal grants and contracts. Overall, UAF research attracts approximately $40 million in federal grants to Alaska.
- The University of Alaska Museum has been rated one of the top visitor attractions in the state.
- The Rasmuson Library on campus is the largest in the state and serves all of Alaska.
- The expansion of the UAF Geophysical Institute, begun in 1995, will bring 900 new jobs to the state.

For more information, see *The Northern Catalyst, UAF Generational Impact, 1997.*

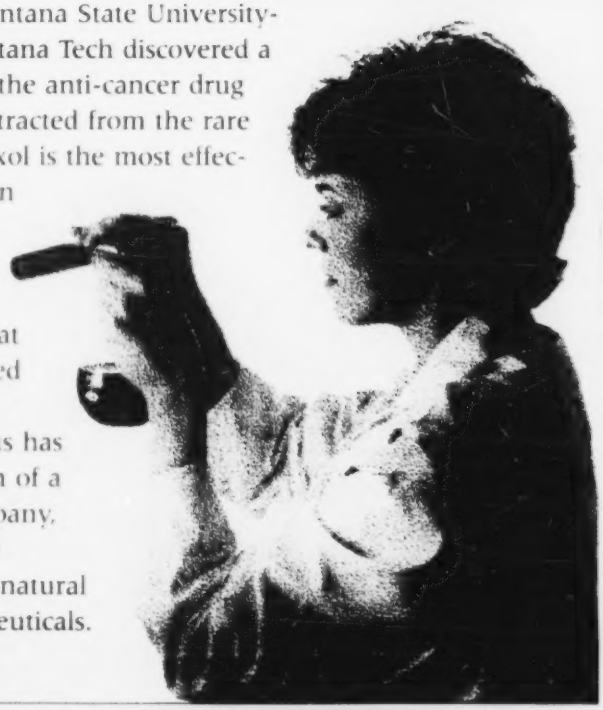
University of Arizona

- For every state dollar invested in the university, the university generates $6.75 dollars total spending in the economy of Pima County.
- The university spent $778 million in 1994–95 on supplies, equipment, acquisition, maintenance, and other institutional expenses, most of it going to the state economy.
- University employees spent $361 million in the local economy.
- Students spent $540 million.
- Visitors added another $54 million.
- The university employs 12,033 people, and its presence generates an additional 27,500 jobs in the county.
- The university generated $88 million in tax revenue in FY 94–95.

Making a Difference

An Anti-Cancer Fungus

Scientists at Montana State University-Bozeman and Montana Tech discovered a fungus that makes the anti-cancer drug taxol. Originally extracted from the rare pacific yew tree, taxol is the most effective drug for ovarian and breast cancers, but currently exists in quantities too small to treat all women who need it. Discovery of the taxol-making fungus has led to the formation of a new Montana company, whose scientists are searching for other natural sources of pharmaceuticals.



For more information, see *The University of Arizona, Economic Impact, 1994–1995.*

Arizona State University

- For every state dollar invested in the university, the university generates $9 dollars total spending in the state economy.
- The university spent $237 million in 1996 on supplies, equipment, acquisition, maintenance, and other institutional expenses, most of it going to the state economy.
- University employees spent almost $207 million in the local economy.
- Students spent more than $546 million.
- Visitors added another $28 million.
- The university employs 5,554 people.
- Its presence generates an additional 35,000 jobs in the state.

University of California, Davis

- In FY 95–96, UC Davis had a direct economic impact on the region's economy of more than $1.2 billion.
- The university's total impact on the California economy is $2.5 billion.
- The university provides employment to more than 20,000 people.
- UC Davis received more than $175 million in extramural funding, including more than $79 million to support 870 brand new research projects.

LONG-TERM IMPACTS

- The university is an incubator for ideas and inventions that result in economic returns. In 1995–96, UC Davis research, managed by the University of California Office of Technology Transfer, generated more than $1.3 million for the campus.
- UC Davis inventions yielded more than $4.8 million during fiscal 1995–96.

For more information, see *UC Davis Annual Report 1996.*

University of California, Irvine

- For every state dollar invested in UCI, the university generates more than $2.50 total spending in the region's economy.
- In FY 95–96, the UCIs total economic impact on the region was more than $1.1 billion.
- The university spent $244 million in 1995–96 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- UCI employees spent $252 million in the local economy.
- Students spent $108 million.
- Visitors added another $10 million.
- The university employs 11, 821 people.
- In FY 95–96, the UCI generated more than $13 million in tax revenue.

LONG-TERM IMPACTS

- Several local companies owe their existence to technological discoveries made at UCI, and many others have benefited from developing cooperative research contracts with UCI.
- More than 27,000 UCI alumni have remained in the region, directing and working in local companies, earning and spending millions annually, boosting economic growth.

For more information, see *The Economic Impact of The University of California, Irvine on Orange County, 1996.*

University of California, Los Angeles

- UCLA generated $5.06 billion total spending in the state economy in 1996–97.
- The university spent $2.2 billion in FY 96 on salaries, supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $857.3 million.
- Students spent $366.2 million.
- The university has 19,164 employees.
- The university's presence in the state generates an additional 56,100 jobs.

LONG-TERM IMPACTS

- UCLA acts as an economic magnet, attracting funds, grants, gifts from out-of-state donors, and spending by students and visitors. UCLA's reputation for academic and research excellence is

attractive to key industries. UCLA also provides a well-educated, highly skilled workforce that benefits business and industry.

For more information, see *UCLA Economic Impact.*

University of California, Riverside

- In FY 95–96, UCR's direct economic impact on the region was more than $346.7 million.
- UCR employees spent $132 million. About 75 percent of UCR employees live within a 30-mile radius of the campus.
- UCR students spent $118 million.
- The university employs 5,065 people.
- The university received $34 million in federal grants, appropriations, and contracts.
- More than 60,000 people visited cultural facilities and attended performances, conferences, and events at UCR.

LONG-TERM IMPACTS

- 35 percent of the June 1995 graduates from UCR found jobs in the local economy.
- The College of Engineering's Systems Clinic, Environmental Engineering program, and the Visualization and Intelligent Systems Laboratory are making important contributions to the local and state economies.

For more information, see *University of California, Riverside Economic Impact Report 1995–96.*

University of California, Santa Barbara

- UCSB's direct expenditures in the local economy through salaries, purchases, and capital projects totaled about $300 million a year in 1991–92.
- Spending by the university generates an estimated $347 million a year in increased production by Santa Barbara firms.
- More than 80 percent of UCSB's annual budget is spent in Santa Barbara County.
- UCSB students are responsible for contributing at least $131 million annually to the local economy.
- Between 15,000 and 16,000 jobs in Santa Barbara County are directly or indirectly dependent upon UCSB.
- The university is the biggest employer in the county.

LONG-TERM IMPACTS

- Construction at UCSB will create more than 3,000 full-time jobs between 1992 and 2002, providing workers with more than $88 million in earnings.

For more information, see *Pacific Blue, Solid Gold: A Special Report on UCSB's Contributions to the Economy of Santa Barbara County.*

University of California, Santa Cruz

- For every state dollar invested in the university, UCSC generates $1.23 dollars total spending in the state economy.
- UCSC generated a total economic impact within the local community of $559.1 million.
- The university spent $232 million in 1995 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- 191 construction contracts were awarded in 1995–96 for a combined value of $8.8 million.
- UCSC employees spent $113.7 million in the local economy, while students spent $76 million, and visitors added another $16.5 million.
- Over the years, UCSC has been awarded $363 million for work within its Organized Research Units and in other campus research programs.
- The university employs 5,270 people.
- The university generated $16.7 million in tax revenue in 1995.

LONG-TERM IMPACTS

- Working with California farmers, UCSC researchers have been at the forefront of sustainable agriculture for years.
- UCSC has a large number of research programs and facilities that support the discovery and dissemination of significant scientific advances.

For more information, see *UC Santa Cruz: A University for the 21st Century,* 1997.

California Polytechnic State University, San Luis Obispo

- The total direct economic benefit of the university to the city and county of San Luis Obispo was almost $168 million for FY 94-95.
- Students spend some $81 million annually in and around the city.
- Faculty and staff spend more than $61 million.
- The combined total direct and indirect economic impact on the county is over $319 million a year.

For more information, see *The Economic Impact of Cal Poly on the City and County of San Luis Obispo, California, 1996.*

California State University, Sacramento

- For every state dollar invested in the university, the university generates more than $3 total spending in the region's economy.
- The university's total economic impact on the region is almost $300 million.
- The university spent $65 million in 1994–95 on products and services, with $40 million of it going to the state economy.
- University employees spent $54 million in the local economy.
- Students spent $111 million.
- The university employs 5,200 people.
- Its presence generates an additional 8,300 non-university jobs in the region.

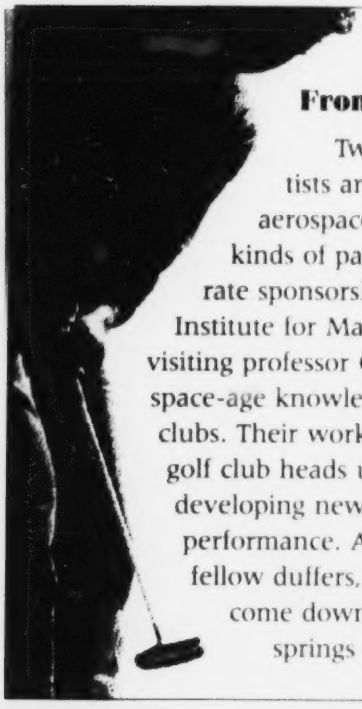
For more information, see *CSUS and US: The Economic Impact of California State University on the Surrounding Region, 1997.*

University of Colorado

- Every state dollar invested in the university generates more than a $10 dollar increase in the gross state product (GSP), a measure of the total value of goods and services produced in Colorado.
- In FY 94, CU's direct expenditures of slightly over $1 billion led to a $1.92 billion increase in Colorado's GSP.
- CU spent $227 million in FY 94 on such items as capital outlays and intermediate goods and services.
- CU students spent almost $720 million in Colorado.
- Visitors, employees, and students spent over $93 million in travel dollars in FY 94.
- CSU employs about 20,000 people.
- An additional 16,000 jobs are also directly attributable to CU.
- The state treasury recaptures at least 42 cents in tax revenues for every dollar it allocates to CU.

LONG-TERM IMPACTS

- CU holds an equity position in nine private companies that account for 275 employees in Colorado.
- The presence of a number of major federal scientific installations in Colorado is due to CU. Five of these federal facilities account for over 3,300 employees in Colorado, and support about 7,500 total jobs in the state.



Making a Difference

From Spacecraft to Golf Clubs

Two University of Idaho materials scientists are applying lessons learned from years of aerospace materials research to launch different kinds of payloads—on the golf course. With corporate sponsorship, Dr. F.H. Froes, director of UI's Institute for Materials and Advanced Processes, and visiting professor Oleg Senkov have been using their space-age knowledge to design new and improved golf clubs. Their work is concentrated on developing better golf club heads using advanced materials, much of it on developing new titanium alloys that will improve club performance. Although Froes hopes he's helping fellow duffers, he admits his own scores have not come down, though he quickly adds, "Hope springs eternal."

For more information, see *The University of Colorado: A Sound Investment in Colorado, Economic Impact Summary, 1995.*

Colorado State University

- Every state dollar invested in the university generates $4 dollars total spending in the state economy.
- The university spent $333.9 million in 1992 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- CSU employees spent $165.5 million in the local economy.
- Students spent $140 million in the local economy.
- Visitors added another $39 million.
- CSU employed 9,500 people in 1992.
- The university's presence generated another 11,400 jobs.
- In 1992, the university generated $14 million in tax revenue.

LONG-TERM IMPACTS

- Colorado State University offers a broad range of programs, community and educational services, technical and special assistance, cultural events, and volunteer/charitable contributions that provide long-term benefits to the community and state at large.

For more information, see *Economic Connections to Fort Collins, Larimer County, and the State of Colorado.*

University of Idaho

- For every tax dollar spent on the University of Idaho, the university generates $1.50 total spending in the state economy.
- The university spent $227.7 million in 1997 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University of Idaho employees spent $90 million in 1997.
- Students spent $20 million.
- The university has almost 3,000 employees.
- The university's presence in the state generates an additional 1,242 jobs.

LONG-TERM IMPACTS

- The university's participation in the National Science Foundation's Experimental Program to Stimulate Competitive Research has made a significant contribution to Idaho's economy. Each state dollar invested in the program has returned over $11 in the last three years. A significant portion of grant funding enters the economy in the form of salary dollars.

For more information, see *Idaho Research, 1997.*

The University of Montana

- The University of Montana spent $170.7 million in FY 97 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $34 million.
- Students spent $80 million.
- Visitors added $17 million.
- The University has 1,829 employees.
- The University of Montana generated about $18 million in tax revenue

For more information, see *The University of Montana 1996 Graduate Survey.*

Montana State University

- For every state tax dollar spent on the MSU, the university generates $2.50 total spending in the state economy.
- MSU's total economic impact on the state was $189 million in FY 95.
- The university spent $245 million in FY 95 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- Students spent $54 million.
- Visitors added $7.5 million.
- The university has 3,100 employees.
- The university's presence in the state generates an additional 2,100 jobs.
- Montana State University generated about $46.6 million in tax revenue.

LONG-TERM IMPACTS

- MSU's Potato Lab provides virus-free seedlings to Montana's farmers, the basis of a $27 million seed potato business.
- Scientists at MSU-Bozeman and Montana Tech, discovered a fungus that makes the

anti-cancer drug taxol. This has led to a new Montana company, whose scientists are searching for other natural sources of pharmaceuticals.

For more information, see *An Economic Partnership, MSU's Impact on Montana.*

University of Nevada, Las Vegas

- For every state tax dollar spent on UNLV, the university generates $9.50 total spending in the state economy.
- In FY 93, the university had a total economic impact on Clark County of $250 million.
- The university spent $177 million on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $63.2 million.
- Students spent $69.7 million.
- The university has 2,613 employees.
- The university's presence in the state generates an additional 8,045 jobs.

For more information, see *The Economic Impact of UNLV, 1994.*

University of Nevada, Reno

- The statewide economic impact of UNR in FY 93 was $457.4 million.
- The university spent $187 million in FY 93 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- Students spent $66.2 million.
- Visitors added $22 million.

For more information, see *University and Community College System of Nevada, Economic Impact Report, 1994.*

University of New Mexico

- In FY 96, the university had a total economic impact on the state of $1.29 billion.
- The university spent $762.8 million on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- The university has 17,000 employees.
- The university's presence in the state generates an additional 28,900 jobs.
- Research awards from federal sources alone generated $165 million in economic activity in the state, most of it in the Albuquerque area.
- The university generated about $27 million in tax revenue.

LONG-TERM IMPACTS

- The Division of Continuing Education reaches more than 40,000 citizens a year through the Albuquerque area and beyond.
- UNM educates one-third of the state's lawyers, one-third of its doctors, one-quarter of the school teachers, and half of the state's pharmacists.
- More than 50,000 alumni live in the state, contributing greatly to the economic and intellectual life of the state.
- Through a variety of academic and public service programs in colleges and schools throughout the university, UNM assists small businesses, large corporations, and local governments and their employees.

For more information, see *The University of New Mexico: A Wise Investment, 1997.*

Oregon State University

- For every state tax dollar spent on Oregon State University, the university generates more than $1.66 total spending in the state economy.
- In FY 96, about $340 million in income and 14,000 jobs in the Oregon economy were associated with OSU.
- Employees spend $82.7 million.
- Students spent $83 million.
- Visitors contributed about $4.8 million to the local economy.
- The university has 4,327 faculty and staff.
- The university's presence has created another 5,900 jobs.
- University employees paid about $9.7 million in taxes.
- In 1996, Oregon State attracted $138 million in research grants and contracts, $116 million of which was from out-of-state sources. These funds enable university researchers to seek discoveries that sustain Oregon's mature industries, allow faculty to explore new horizons, and give students the chance to apply their education to practical and relevant problems.

For more information, see *Oregon State University: Economic Impacts of an Institution of Higher Education, 1997.*

University of Oregon

- For every state tax dollar spent on the University of Oregon, the university generates $8 total spending in the state economy.
- The university spent $270 million in FY 96 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $162 million.
- In FY 92, students spent $101 million.
- Visitors spent about $6 million.
- The university has 4,000 employees.
- The university generates $15 million in taxes.
- Gifts, research grants, contracts, federal financial aid, and out-of-state students bring the state $157 million each year.

LONG-TERM IMPACTS

- The UO's research programs help create high-paying jobs in technology-oriented industries, improve professional practice, and strengthen small businesses by transferring technology to existing companies and attracting new companies to Oregon.
- Two-thirds of all UO graduates take their first job in Oregon, which reinvests the state's resources and provides Oregon with professional expertise.

For more information, see *Financial Impact of the University of Oregon.*

Oregon State System of Higher Education

- For every state tax dollar spent on the University of Oregon System, the system generates $8 total spending in the state economy.
- The system's institutional budget was $851 million in 1993–94.
- System employees spent $505.6 million.
- Students spent $331 million.
- The University of Oregon system has 22,500 employees.
- The system's presence generates an additional 21,000 jobs.
- The university generated $25.1 million in taxes.

Portland State University

- The university spent $37.5 million in 1995–96 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $36.5 million.
- Students spent $75.8 million.
- Visitors added $3.5 million to the local economy.
- The university has 2,214 employees.
- The university's presence has created another 3,087 jobs.
- University employees paid almost $5.7 million in personal income taxes.

San Diego State University

- Every state dollar invested in the university generates more than $4.40 total spending in the region's economy.
- The university's total economic impact on the region was $770 million in 1995–96.
- In 1995–96, SDSU spent $181 million on wages and salaries and $69 million on products and services.
- SDSU students spent $293 million in the San Diego region.
- The university employs 3,900 people.
- Its presence generates an additional 12,200 jobs in the region.

Making a Difference

A Research and Technology Park

The Washington State University Research and Technology Park is managed by the WSU Research Foundation, a private, nonprofit corporation. The park's goals include fostering economic development in Pullman and southeastern Washington by furthering the growth and development of small and emerging business. In its first four years of managing and operating the research park, the WSU Research Foundation has seen the facility on the north side of campus triple its number of tenants and quadruple the number of people employed (17 companies and agencies, and approximately 100 employees). As a result, the park provides job opportunities and economic growth for the region.

LONG-TERM IMPACTS

- SDSU is the primary producer of the region's professional labor force.
- More than 300 local organizations have been founded or are headed by SDSU graduates.
- SDSU is at the forefront of the development of new technologies for solving local and regional economic issues and helping local manufacturing.
- SDSU's colleges, centers, and special programs are assisting local small business and promoting the region's economic development.

For more information, see *Impacts: San Diego State University's Role in the Growth of the Region.*

Utah State University

- The university spent $287 million in FY 96 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- The university has 2,700 employees.

University of Utah

- For every state tax dollar spent on the University of Utah, the university generates $5 total spending in the state economy.
- The university spent $927.3 million in 1996 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $301.9 million.
- Students spent $119.2 million.
- Visitors spent $11 million.
- The university has 13,600 employees.
- The university's presence has created another 9,400 jobs.
- The university generated about $38 million in taxes.

University of Washington

- In FY 93, the University of Washington generated $2.8 billion in economic activity statewide.
- For every state tax dollar spent on the University of Washington, the university generates $9 total spending in the state economy.
- UW's budget totaled $1.6 billion.
- The university has 21,000 employees.
- The university's presence has created another 55,000 jobs.
- The UW attracted $431 million from outside the state to support its programs.
- The university generated about $113 million in state taxes.

LONG-TERM IMPACTS

- About 120,000 UW graduates reside in the state. UW graduates head 33 of the state's 100 largest privately held companies.
- Between 1991 and 1993, over a dozen new Washington companies were formed to commercialize technologies developed at the UW. Thirty-eight such companies have been formed since 1975.
- In 1993, *Fortune* rated Seattle as the fourth best city in America for business relying on knowledge workers and cited the presence of the UW as a key factor.

For more information, see *The Return on an Investment in Education, University of Washington, 1995.*

Washington State University

- University employees spent $153 million in 1996
- Visitors spent $2.1 million in 1993.
- The university has 6,218 employees.
- The university generated about $1 million in taxes and fees for the city of Pullman in 1993.

LONG-TERM IMPACTS

- The WSU Research and Technology Park fosters economic development in Pullman and southeastern Washington by furthering the growth and development of small and emerging businesses.
- The Small Business Institute provides student consulting services to area businesses.
- The IMPACT Center provides marketing and technical information that assist Washington farmers and food processors in increasing their exports world wide.

For more information, see *WSU: Making a Difference in Pullman and the Region, 1995.*

The Midwest

University of Akron

- For every state tax dollar spent on the University of Akron, the university generated $3.62 total spending in the state economy.
- In 1992, the university contributed a total of $222 million to Summit County commerce.
- The university spent $169.6 million in 1995–1996 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $38.2 million.
- Students and visitors spent $73 million.
- The university has 4,394 employees.
- The university's presence generated an additional 1,300 jobs.
- The University of Akron generated about $51 million in tax revenue in 1991–92.

LONG-TERM IMPACTS

- The 33,000 University of Akron graduates residing in Summit County earned an added $415 million in 1991-92 by virtue of their degrees. For the 59,156 alumni residing in Ohio, this increased earning power added more than $738 million to Ohio's economy and tax base.

For more information, see *The University of Akron Economic Impact, Summit County, 1991–92.*

Bowling Green State University

- The university spent $289 million in FY 96 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- Students spent $32 million.
- The university has 5,500 employees.
- The university generated about $5.2 million in tax revenue.

University of Cincinnati

- For every state tax dollar spent on the University of Cincinnati, the university generates $8.18 total spending in the state economy.
- The university spent $613 million in FY 97 on supplies, equipment, acquisition, maintenance, and other institutional expenses.

Making a Difference

More Efficient Water Testing

A research team at the University of Missouri-Columbia is using high-powered computers, the latest mapping techniques and detailed databases to help the state focus its water-testing efforts where they're needed most. That research has already saved the state of Missouri nearly $13 million in testing costs by indicating which wells are most susceptible to contamination. In years to come, millions more will be saved, and Missouri's drinking water will remain safe.

- University employees spent $310.3 million.
- In FY 92, students spent $230.2 million.
- Visitors contributed about $15.8 million to the local economy in 1992.
- The university has 7,979 employees.
- The university's presence has created another 5,477 jobs.
- University employees paid almost $8 million in taxes in FY 96.
- In 1994, the UC Medical Center had a direct and indirect impact on the Cincinnati community of $1.6 billion. Medical Center spending is linked to over 23,000 full or part-time jobs in all sectors of the area economy.

For more information, see *An Economic Impact Statement, Ohio's Education Portfolio, University of Cincinnati.*

Cleveland State University

- For every state tax dollar spent on Cleveland State University, the university generates $9 total spending in the state economy.
- The university spent $158.4 million in FY 96 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $56.3 million.
- Students spent $110.7 million.
- Visitors added $25 million.
- The university has 5,614 employees.
- The university's presence in the state generates an additional,900 jobs.
- Cleveland State generated about $3.5 million in tax revenue.

University of Illinois

- A University of Illinois education more than doubles the earnings of the average graduate. The 1996 class at the Chicago and Urbana-Champaign campuses can expect to earn $10 billion during their working years above what they would have earned without college.
- The increased earning power of a UI degree over an average lifetime is eight times its cost to a student and family.
- UI boosts the lifetime earnings of its graduates about 25 percent above the national college norm.

For more information, see *The Earning Curve, Cost-Benefit Returns of Education at the University of Illinois, 1997.*

Indiana University

- For every tax dollar spent on Indian University, the university generates $4.72 total spending in the state economy.
- The university spent $1.36 billion in 1995–96 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- IU employees spent $400 million in 1995–96.
- Students spent $480 million in 1996–97.
- Visitors to IU spent $85 million in calendar 1996.
- The university has 15,500 employees.
- The university's presence in the state generates an additional 10,000 jobs.
- IU generated about $100 million in tax revenue (excluding property taxes) in 1995–96.

LONG-TERM IMPACTS

- Work by professors at IU's School of Public and Environmental Affairs on global warming's impact on the economy of the Great Lakes region will allow planners and economic development officials to plan more effectively for the future of the region.
- Indiana businesses owned or operated by IU graduates generate $8.9 billion in sales each year.

For more information, see *The Economic Impact of Indiana University on the State of Indiana, 1995.*

University of Iowa

- For every tax dollar spent on the University of Iowa, the university generates $10 in economic activity.
- In 1993, about $1.4 billion in spending in Iowa was attributable to the University of Iowa.
- In one year, University of Iowa employees pumped $377 million directly into the state economy.
- Students spent $144 million in 1993.
- Visitors added another $20.6 million to the local economy.

- The university has more than 13,000 full-time and 4,000 part-time employees.
- The university's presence in the state generated an additional 37,000 jobs.
- The University of Iowa generated about $66 million in tax revenues.

LONG-TERM IMPACTS

- University alumni increase the standard of living, earning more than they would have if they had not gone to college.
- University research pushes the frontiers of knowledge, with university hospitals and clinics promoting better health among Iowans.

For more information, see *The Regional Economic Impact of the University of Iowa, 1994.*

Iowa State University

- For every state dollar invested in the university, ISU generates $2.80 total spending in the state economy.
- The university spent $663 million in FY 97 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- ISU employees spent $213 million in the local economy.
- Students spent $130 million in the local economy.
- ISU employs 6,087 people.
- The university's presence generates another 16,200 jobs.
- ISU generated $30 million in tax revenue.

LONG-TERM IMPACTS

- ISU research has given rise to new technologies and helped local economic development.
- ISU is also helping to diversify Iowa's economic base and is helping companies develop new products to remain competitive.
- ISU research and outreach is also helping Iowa's agricultural sector.

For more information, see *Iowa State University Technology Transfer Accomplishment: Highlights of Economic Development Activities, 1996 Annual Report.*

Kent State University

- For every state tax dollar spent on Kent State University, the university generates $2.91 total spending in the state economy.
- The university spent $303 million in FY 96 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $104 million.
- Students spent $107.8 million.
- Visitors added $10 million.
- The university has 7,672 employees.
- The university's presence in the state generates an additional 11,127 jobs.
- Kent State University generated about $16 million in tax revenue.

University of Kansas

- For every tax dollar spent on KU, the university generates $1.50 total spending in the state economy.
- The university spent $592 million in 1997 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- Students spent $141 million in 1995.
- KU has 9,000 employees.
- The university's presence in the state generates an additional 5,000 jobs.
- KU generates about $200 million in tax revenue.

Kansas State University

- In 1993, the effect of KSU's annual impact on the economy of Kansas was more than 10 times the amount of the state's investment.
- KSU has a total annual impact on the economy of Kansas of $1.3 billion, including $600 million from the value-added economic consequences of applied research at KSU.
- Annual expenditures associated with all activities at the university were estimated to be in excess of $700 million.

LONG-TERM IMPACTS

- KSU's research programs, particularly in the area of applied agricultural research, will positively impact the state's economy for years to come. For example:
- The development of Newton wheat, the first semi-dwarf wheat in Kansas, has increased state income by more than $700 million since 1980;

- KSU's research on red meat processing has increased the value of Kansas meat products by $210 million annually;
- KSU researchers have developed electronic livestock identification systems and detection systems for viral and microbial pathogens that will save $6 to $7 million each year.

For more information, see *Kansas State University 1995 Economic Impact Report.*

Langston University

- The university spent $22.6 million in 1996 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $29 million in 1993.
- Students spent $46.3 million.
- Visitors spent about $19 million.
- The university has 563 employees.

Miami University

- The impact of Miami University's spending on the local and state economies was $740 million in 1995–1996.
- The university spent $244.5 million in FY 96 on current operations.
- University employees pumped $98.8 million in spendable income into the state and local economy in FY 96.
- Students spent $111 million in the 1995–1996 academic year.
- Visitors added $12.6 million in 1996.
- The university has 3,611 non-student employees.
- The university's presence in the state generates an additional 3,367 jobs.
- Miami University produced about $11.1 million in state revenues.

LONG-TERM IMPACTS

- MU graduates residing in Ohio each year add more than $2.1 billion to Ohio's economy and tax base.
- MU received more than $14.4 million in external funds in FY 96 for research and other creative activities of its faculty. With these dollars, MU did research on seedlings that orbited the earth; reduced pest damage on Ohio crops using natural methods; produced a consumer's guide to long-term care for the elderly; and developed a first-of-its kind science magazine for children.

For more information, see *Economic Impact: Miami University.*

Michigan State University

- For every state tax dollar spent on MSU, the university generates $1.50 total spending in the state economy.
- MSU's payroll generated nearly $694 million in personal income and more than 35,000 jobs in Michigan in 1996.
- The university spent $435.6 million on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $369 million.
- Students spent $127 million.
- Visitors added $22 million.
- The university has 21,345 employees.
- The university's presence in the state generates an additional 12,000 jobs.
- MSU generated about $22 million in payroll tax revenue.

LONG-TERM IMPACTS

- MSU investigators are working successfully with a score of Michigan firms to submit Small Business-Initiated Research (SBIR) grant proposals to the National Aeronautics and Space Administration, the National Science Foundation, the National Institutes of health, and the US department of Agriculture.
- MSU's School of Packaging is ranked number one in the world for the quality of its graduates, who make up more than 75 percent of the $60 billion packaging industry.
- MSU graduates living in Michigan earned about $4.6 billion in 1990. These earnings represented approximately $1.8 billion more than these individuals could have been expected to earn that year without a university education.

For more information, see *Michigan State University: Our Leadership Priorities in Michigan, A Profile of Programs and Economic Impact, 1995.*

Michigan Technological University

- For every state tax dollar spent on Michigan Technological University, the university generates $6.50 total spending in the state economy.
- The university spent $130 million in 1995–96 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $40 million.
- Students spent $25 million.
- Visitors added $5 million.
- The university has 3,300 employees.
- The university's presence in the state generates an additional 3,000 jobs.
- Michigan Technological University generates about $22 million in annual tax revenue.

University of Michigan

- For every state tax dollar spent on UM, the university generates $8.25 total spending in the state economy.
- Overall, UM pumped an estimated $2.5 billion into the local and Michigan economies in 1994-95.
- Since 1990, UM has ranked number one among public universities in volume of sponsored research activities. The volume of research was over $441 million in 1995–96.
- The university spent $1.23 billion in 1994–95 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $786.4 million.
- Students spent $250.6 million.
- Visitors added $51 million.
- The university has 40,664 employees.
- In-state spending by the university accounts for the creation of an estimated additional 22,864 jobs throughout the state.
- UM generated about $90.7 million in tax revenue.

LONG-TERM IMPACTS

- The university has established a Center for Display Technologies, which will contribute to a field that has the potential to be a multibillion industry.
- Since 1991, the Technology and Management Office has been responsible for 164 patents applied for. The university has received more than $7.9 million in royalty income from technology licenses and patents in the last five years.
- The production and transference of new technologies at the University of Michigan enhances the ability of business and industries within the state to compete nationally and internationally.
- Since 1951, 155 companies have spun-off from the UM. These companies account for more than $374.5 million of revenue/sales in Michigan and employ more than 3,300 people.

For more information, see *The Economic Impact of the University of Michigan*

University of Minnesota

- For every state tax dollar spent on the University of Minnesota, the university generates $3.80 total spending in the state economy.
- The university spent $1.6 billion in 1995–96 on supplies, equipment, acquisition,

Making a Difference

Help for High Tech

A young high-tech Iowa company had severe cash flow problems because it had started out undercapitalized and its early sales revealed that its first product had design flaws. With help from Iowa State University's Center for Industrial Research and Service, the company was able to find a solution for the design flaw, but needed more cash to implement the solution. The company also realized it had to sell more to increase its cash flow, but it lacked experienced sales people. Iowa State University's Small Business Development Center found the company an experienced sales consultant who knew the industry. The SBDC also helped the company develop a bare bones cash flow and find new sources for additional equity capital.

maintenance, and other institutional expenses.
- University employees spent $486 million.
- Students spent $422 million.
- Visitors added $100 million.
- The university has 29,310 employees.
- The university's presence in the state generates an additional 11,200 jobs.
- The University of Minnesota generated about $125 million in tax revenue.

University of Minnesota Duluth

- The 1,299 persons employed at UMD in 1993 generated 3,904 jobs in surrounding St. Louis County.
- The $50.8 million UMD paid to students, faculty, and staff generated an economic impact of $119.4 million in surrounding St. Louis County.

For more information, see *Impact Study: University of Minnesota Duluth, 1996.*

University of Missouri System

- The University of Missouri System has more than 54,000 students and 14,500 employees.
- The system's annual expenditures in FY 96 were $1.23 billion.

LONG-TERM IMPACTS

- Every dollar spent on the system's Small Business Development Center (SBDC) was leveraged by $20 in new capital, raised from external sources.
- Long term clients of SBDC generated $85 million in incremental sales and 1,363 new jobs as a result of SBDC's assistance.

For more information, see *The Economic Impact of Small Business Development Center Counseling Activities in Missouri: 1994–1995.*

University of Missouri-Columbia

- For every state tax dollar spent on the University of Missouri-Columbia, the university generates $12.20 total spending in the state economy.
- UM has a $2 billion impact on the state of Missouri.
- The university spent $753 million in FY 96 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $283 million.
- Visitors added $3.2 million.
- The university has 17,140 employees.
- The university's presence in the state generates an additional 16,353 jobs.

For more information, see *Chancellor's Report for 1996–97.*

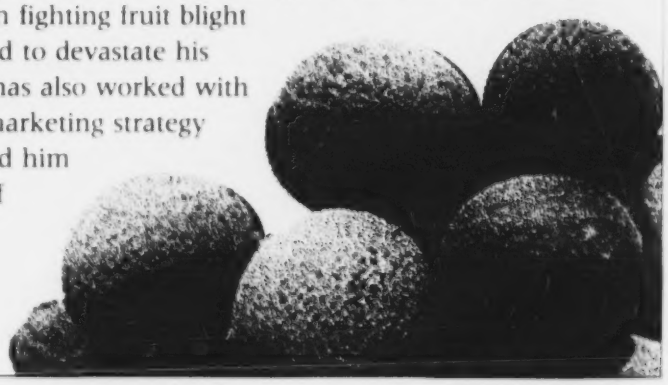
University of Missouri-Kansas City

- For every state tax dollar spent on the University of Missouri-Kansas City, the university generates $5 total spending in the state economy.
- The university spent $75.4 million in FY 96 on supplies, equipment, acquisition, maintenance, and other institutional expenses.

Making a Difference

Acres of Melons

When Abner Horrall started farming melons, he had 20 acres of cantaloupe and 10 acres of watermelon. Twenty years later, his Melon Acres grow about 300 acres of cantaloupes and 70 of watermelon, shipping fruit to 11 states and Canada. Part of that success is due to the help Horrall got from Purdue University. The university helped Horrall research ways to store his melons and provided aid in fighting fruit blight that threatened to devastate his crop. Purdue has also worked with Horrall on a marketing strategy that has helped him become one of the largest melon growers in the state.



- University employees spent $79 million.
- Students spent $113 million.
- Visitors added $1.1 million.
- The university has 2,000 employees.
- The university's presence in the state generates an additional 9,000 jobs.
- The UMKC generated $4.1 million in tax revenue.

University of Missouri-Rolla

- The UMR spent $101 million in 1996-97 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $30.6 million.
- Students spent $37 million.
- Visitors added $1.46 million.

LONG-TERM IMPACTS

- Graduates of UMR have founded 368 Missouri companies that employ more than 13,000 people and have annual sales of more than $1.4 billion.

University of Nebraska
(UN-Lincoln, The UN Medical Center, UN at Omaha, UN at Kearney)

- For every state tax dollar spent on the University of Nebraska, the university generates $3.3 total spending in the state economy.
- The university generated $3 billion in economic activity in the state in FY 94.
- The university spent $108 million in 1993–94 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $400 million.
- Students spent $63 million.
- The university has 15,700 employees.
- The university's presence in the state generates an additional 20,000 jobs.
- The University of Nebraska generated about $106 million in tax revenue.

LONG-TERM IMPACTS

- Cooperative ventures through partnerships with the University of Nebraska Foundation, state and federal governments, and the university have resulted in leveraging of funds into multi-million dollar projects that are major economic supports and that are largely federally funded.
- New, start-up companies and product development and/or expansion of over two dozen existing companies in Nebraska have been generated as a direct result of UN research.
- Some 700 technology assistance projects were provided for the food industry by the Food Processing Center of the UN-Lincoln's Institute of Agriculture and Natural Resources between 1989 and 1994.

For more information, see *Return on Investment University of Nebraska*

University of Nebraska-Lincoln

- For every state tax dollar spent on NC State University, the university generates $4 total spending in the state economy.
- In 1992, the university generated $1.3 billion in economic activity.
- UNL brings in $48 million a year from out of state in federal grants, contracts, and appropriations. Private gifts, grants, and contracts total almost $18 million.
- The university spent $512 million in FY 96–97 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $130 million in FY 91–92 and had a total economic impact of $390 million on the state economy.
- Students spent $150 million and had a total economic impact of $400 million.
- Visitors spent $9 million and had a $26 million total impact.
- The university has 5,100 employees.
- The university's presence in the state generates an additional 15,300 jobs.
- UNL generated about $30 million in tax revenue.

LONG-TERM IMPACTS

- UNL research, education, and outreach activities contribute to the development and expansion of businesses in the state, enhance the physical

well-being of Nebraskans and their environment, and contribute to the overall quality of life.

North Dakota State University

- The university spent $96 million in FY 95–96 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees and students spent $170 million.
- Student and employee spending results in about $500 million in gross business volume.
- The university has 3,315 employees.
- The university's presence in the state generates an additional 5,000 jobs.

LONG-TERM IMPACTS

- Hundreds of excellent business ideas come through NDSU's Institute for Business and Industry Development each year. NDSU experts help entrepreneurs figure feasibility or troubleshoot new processes. Many ideas relate to agricultural and general manufacturing. Other potential businesses are from the service industries.
- NDSU research and extension efforts help enhance the state crop production. Each 1 percent crop increase means more than $2.9 billion for the state's economy.

University of North Dakota

- For every state tax dollar spent on UND, the university generates $5.48 total spending in the state economy.
- FY 93, the university generated an additional $483 million output for North Dakota industries.
- The university spent $237 million in 1996–97 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $180 million.
- Students spent $52 million.
- The university has 3,636 employees.
- The university's presence in the state generates an additional 7,510 jobs.
- The university generated about $10 million in tax revenue.

LONG-TERM IMPACTS

- UND alumni generate $209.5 million a year additional income in the state thanks to their UND degrees.

For more information, see *The Impact of the University of North Dakota.*

Oakland University

- Oakland University spent $149.5 million in 1995–96 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $42 million.
- Students spent $23.3 million.
- The university has almost 1,900 employees.
- The university generated about $14.7 million in taxes.

Ohio University

- For every state tax dollar spent on Ohio University, the university generates $3.75 total spending in the state economy.
- University employees spent $124.3 million.
- Students spent $186 million.
- Visitors added $4.6 million.
- The university has 3,895 employees.
- The university's presence in the state generates an additional 5,052 jobs.
- Ohio University generated about $20 million in tax revenue.

The Ohio State University

- For every state tax dollar spent on The Ohio State University, the university generates $3.66 total spending in the state economy.
- In FY 94, Ohio State had an economic impact of $3.5 billion on the state of Ohio.
- The university spent $1.6 billion in FY 96 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $625.2 million.
- Students spent $359 million.
- Visitors contributed about $77.8 million to the local economy in 1994.

- The university has 29,266 employees.
- The Ohio State University generates about $34.1 million in tax revenue.

LONG-TERM IMPACTS

- The Ohio Agricultural Research and Development Center generates new agricultural knowledge that is shared with the general public and the agribusiness community, yielding significant economic benefits to Ohio.
- The OSU Medical Center delivers advanced health care and trains health care professionals, most of who stay within the state of Ohio.
- Almost 300 inventions have been disclosed by OSU's Office of Technology Transfer Operations over the past five years, yielding over $7.14 million in royalty income. These discoveries are being used to spur the growth of technology-based business in Ohio.

For more information, see *The Ohio State University Economic Impact Report, Investing in Ohio's Economic Future, 1995.*

Purdue University

- For every tax dollar spent on Purdue, the university generates $4.71 total spending in the state economy.
- Purdue had a total spending impact of more than $2.2 billion dollars on Indiana's economy in 1996.
- The university spent $503.7 million in 1994–95 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- Purdue employees spent $369 million.
- Students spent $310 million.
- Purdue employs the equivalent of 8,350 full-time people.

LONG-TERM IMPACTS

- Purdue's greatest economic impact by far is through the empowerment education gives its graduates and through the long-term benefits of university research.
- Over the past decade, the Purdue Technical Assistance program has provided university expertise to more than 1,850 Indiana businesses.

For more information, see *Purdue Powers Indiana.*

Southern Illinois University

- For every tax dollar spent on SIU, the university generates $4.58 total spending in the state economy.
- The total economic impact of SIU on Illinois in 1991 was $933 million.
- The university spent $42.4 million in 1991 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- SIU employees spent $120 million.
- Students spent $117.5 million.
- Visitors to SIU added another $9.4 million.
- The university has 5,855 employees.
- The university's presence in the state generated an additional 5,747 jobs.

For more information, see *The Economic Impact of Southern Illinois University, 1993.*

University of Toledo

- For every state tax dollar spent on the University of Toledo, the university generated more than $1.62 total spending in the state economy.
- In 1991–92, the university had a total annual impact of $565.2 million in Ohio.
- The university, its employees, students, and visitors spent $282.6 million in Ohio.
- Students spent $89.4 million.
- Visitors contributed about $6.6 million to the local economy.
- The university has 5,363 employees.
- The university's presence has created another 6,703 jobs.
- University employees paid about 8.2 million in taxes in 1992.

For more information, see *An Economic Impact Statement, Ohio's Education Portfolio, University of Toledo.*

Wright State University

- For every state tax dollar spent on Wright State University, the university generated $7 total spending in the state economy.
- The university spent $239.4 million in 1995–96 on supplies, equipment, acquisition,

maintenance, and other institutional expenses.
- University employees spent $67.3 million.
- Students spent $113.3 million.
- Visitors spent $32.2 million.
- The University has 4,172 employees.
- The University's presence has created another 1,700 jobs.
- The university generates about $23 million in taxes.

Western Michigan University

- For every state tax dollar spent on WMU, the state receives a return on investment of 7.3 percent.
- WMU's local economic impact is more than $414 million a year.
- The university's current fund spending was $286 million in 1994–95.
- University spending was $203 million.
- Students spent $191 million.
- Visitors added $17 million.
- The university has 3,187 employees in Kalamazoo County.
- The university's presence generates an additional 4,000 jobs.
- WMU generated about $81 million in tax revenue.

For more information, see *The Economic Impact of Western Michigan University, 1995.*

Wichita State University

- For every tax dollar spent on Wichita State, the university generates $5.67 total spending in the state economy.
- Wichita State had a total short run economic impact of $318.7 million on the state in FY 96.
- The university spent $83.4 million in 1996 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- Wichita State employees spent $121.4 million.
- Students spent $94.1 million.
- Visitors to the university spent $20 million.
- The university has 2,075 employees.
- The university's presence in the state generates an additional 1,000 jobs.
- Wichita State generates about $119 million in annual tax revenue.

For more information, see *Economic Impact of Wichita State University, 1997.*

University of Wisconsin System

- In FY 96, the University of Wisconsin System had an annual impact of $8.2 billion on Wisconsin, not including the salaries of UW System graduates.
- For every state tax dollar spent on the UWS, the system generates almost $10 total spending in the state economy.
- The university's budget was $2.6 billion, two thirds of which came from sources other than state taxes.
- University employees spent $912 million.
- Students spent almost $1.2 billion.
- The system has 40,000 employees.
- University generated an additional 145,000 jobs in the state.
- UWS brought in almost $1.2 billion to Wisconsin in 1995–96.
- University employees paid about $68 million in state income taxes.

LONG-TERM IMPACTS

- The research and service activities within the UWS campuses constitute sizable economic development itself.
- At any one time, over 10,000 research projects are underway, supported by over $360 million in federal and non-federal grants. This infusion acts as an incubator to produce future income from the initial grant.
- The University of Wisconsin-Madison's University Research Park sponsors 63 companies that employ over 1,800 people as a result of collaboration with the university.
- An array of UWS resources are constantly in partnership with the private sector. Economic development is also

fueled by the UWSs renowned outreach and continuing education programs.

- The single most important UWS source of economic development in Wisconsin is the UW graduate.

For more information, see *The Economic Impact of the University of Wisconsin System, 1997.*

University of Wisconsin-Madison

- In FY 1996, UW-Madison's total expenditures in the state totaled $1.63 billion.
- The university's total direct and indirect economic effect on the state was $3.8 billion.
- UW-Madison's gross payroll was $696 million, and its local expenditures were estimated to be $520 million.
- The university's students spent $441 million.
- Visitors spent $295 million.
- In 1995, the university employed 23,201 people.

University of Wisconsin-Milwaukee

- UW-Milwaukee spent $274 million in 1996–97 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $87 million.
- Students spent $111 million.
- Visitors spent $64 million.
- The university has 3,000 employees.
- The university's presence has created another 11,600 jobs.
- The university generated about $33 million in local taxes in FY 92.

The Northeast

University at Albany, SUNY

- For every state tax dollar spent on the University at Albany, the university generates $1.8 total spending in the state economy.
- The presence of the university will generate about $4 billion in economic activity in the region during the decade of the 1990s.
- The university spent $241 million in FY 96 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $120 million before taxes.
- Students spent $73.3 million.
- Visitors added $4 million.
- The university has 4,500 employees.
- The university's presence in the state will generate an additional 10,145 jobs between 1990–2000.

LONG-TERM IMPACTS

- The university has been working with regional and state economic development organizations to assist smaller New York firms to identify, research and penetrate world markets.

For more information, see *University at Albany, A $4 Billion Economic Engine, 1990–1999.*

University at Binghamton, SUNY

- For every state tax dollar spent on Binghamton University, the university generates $2.01 total spending in the state economy.
- In FY 95–96, the university generated $289.2 million in economic activity by local businesses.
- The university spent $177.5 million on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $111.9 million.
- Students spent $30.3 million.
- Visitors added $1.1 million.
- The university has 12,256 employees.
- The university's presence in the state generates an additional 4,344 jobs.

For more information, see *Binghamton University, Contributing to the Local Economy, 1995–1996.*

Making a Difference

Improving The Landscape

Cornell University's Rochester Landscape Technicians Program (RLT), was begun in the early 1990s to match men and women searching for employment opportunities in an industry long in need of trained people. The program, which trains individuals in landscape creation and maintenance,, is a model of a successful public-private job-training program. In its first five years, 129 men and women have graduated from the program, which has achieved an 85 percent job placement rate, and $7.20 average starting hourly wage, and an 80 percent job retention rate. Numerous program graduates have also gone on to pursue continued education and training in the field, while others have earned supervisory positions.

University at Buffalo, SUNY

- For every state tax dollar spent on the University at Buffalo, the university generates $2.32 total spending in the western New York region.
- The total economic impact of UB on the western New York region was $1.4 billion in 1994.
- The university spent $612 million in FY 96 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- Students spent $68 million.
- Visitors added $10 million.
- The university has 4,880 employees.
- The university's presence in the state generates an additional 7,808 jobs.
- UB imported $128 million in research funds into the region in 1994.
- The total education-related increase in lifetime earnings for 1994 UB graduates working in the region is estimated to be some $446 million.
- UB workforce education and training programs improved the skills of 3,627 employees in 1994.
- UB's advanced laboratory and instrumentation facilities serviced more than 291 companies state-wide.
- Technology-intensive firms that have benefited from the services of the UB Foundation Incubator employed more than 300 people and had sales of $31 million.

For more information, see *UB's Vital Role in the Economy of Western New York, 1996.*

The City University of New York

- For every state and city tax dollar spent on CUNY, the university generates almost $18 total spending in the state economy.
- CUNY's total economic impact within New York State is nearly $13 billion.
- The university spent $123 million in 1995 on supplies, equipment, and services.
- $337 million in construction and facilities renovation was put into New York's economy by CUNY.
- University employees spent $526 million.
- Students spent $810 million.
- Visitors added $22 million.
- CUNY employs 25,450 people.
- CUNY's impact leads to the creation of an extra 321,210 jobs.
- CUNY graduates and employees generate about $717 million in state and city tax revenues each year.

LONG-TERM IMPACTS

- 1970–1995 graduates spend $4.3 billion more in New York each year than they would have spent had they not gone to college.

For more information, see *Return to New York: The CUNY Investment, A Report on the Economic Impact of The City University of New York.*

Cornell University

- In 1994–95, Cornell spent $1.3 billion in support of its current operations.
- More than 1,300 corporations supported Cornell with over $500 million in contracts, grants, and gifts from 1993 to 1996.
- Cornell had more than $321 million in research expenditures in FY 96.
- Cornell employs 9,144 people.

LONG-TERM IMPACTS

- Almost 50 percent of Cornell's undergraduates—degree holders who entered the workforce in 1994—accepted positions in New York State.
- Cornell, with more than $321 million expended for research in FY 96 and its partnerships with industry, has a significant impact on the regional and state economy.
- Cornell's research has helped 60 companies with more than 2,800 employees in the Ithaca area and annual revenues greater than $292 million.

For more information, see *Impact, Cornell University Addresses Contemporary Issues, 1997.*

University of Delaware

- The total economic impact of university students and employees on Delaware's economy is $83 million in salaries and wages generated.
- University employees spent about $98 million in FY 95, annually supporting 2,700 jobs outside the university. These jobs generated $51 million in annual wages.
- University students spent about $83 million off campus.

supporting 1,580 jobs and $32 million in associated wages.

- Largely as a result of its extensive research capabilities, the University of Delaware spent an estimated $61 million in sponsored funds.
- The university returned $8.1 million in employee withholding taxes to the state and the city of Wilmington in 1994.

LONG-TERM IMPACTS

- The university makes a substantial contribution to preparing a skilled workforce for tomorrow. In 1993–94, 73 percent of all bachelor's degrees awarded by Delaware higher education institutions were University of Delaware degrees, as were 61 percent of all master's degrees and 100 percent of all Ph.D.'s

University of the District of Columbia

- For every dollar appropriated for UDC, the university generates $3.52 total spending in the local economy.
- The total economic impact of UDC in 1991 was more than $264 million.
- The university spent $43 million in 1991 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- UDC employees spent $28 million in the local economy in 1991.
- Students spent $26 million in the local economy.
- UDC employed 1,211 people in 1991.
- The university generated $14 million in tax revenue.

LONG-TERM IMPACTS

- UDC graduates spend more in the District of Columbia than they would have if they had not gone to college. For example, those who graduated between 1981 and 1991 are spending an additional $57 million a year in the nation's capital.

For more information, see *University of the District of Columbia: Higher Education has a $264 Million Economic Impact.*

Indiana University of Pennsylvania

- The total economic impact of IUP on the local economy was $189 million in FY 96.
- The university spent $3.8 million in 1996 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $29.5 million.
- Students spent $42 million.
- Visitors spent $7.4 million.
- The university has 1,712 employees.
- The university's presence has created another 1,600 jobs.
- The university generates about $18 million in taxes.

For more information, see *Socioeconomic Impact on the Local Community of Indiana University of Pennsylvania.*

University of Maryland, College Park

- For every state tax dollar spent on the University of Maryland, the university generates $8 total spending in the state economy.
- The university spent $674 million in FY 96 on supplies, equipment, acquisition, maintenance, and other institutional expenses (not including its capital budget).
- University employees spent $350 million in 1993.
- Students spent $175 million.
- Visitors added $20 million.
- The university has 9,400 employees.

LONG-TERM IMPACTS

- The university has many unique facilities, research centers, and institutes that attract new research projects and funding as well as providing expanded knowledge in business, science, and technology.
- The university's faculty and research facilities are a magnet for new businesses and organizations to the Washington-Baltimore area.
- The university's Cooperative Extension and the Maryland Agricultural Experiment Station are essential partners in the state's multi-billion dollar agricultural and environmental industries.

For more information, see *A Partner in Maryland's Growth: The Economic Impact of the University of Maryland at College Park, 1993.*

University of Maryland Eastern Shore

- UMES spent $49 million in FY 97 on supplies, equipment, acquisition, maintenance, and other institutional expenses.

- University employees spent $15.3 million.
- Students spent $7.5 million.
- Visitors added $750,000.
- The university has 588 employees.
- The university's presence in the state generates an additional 400 jobs.
- UMES generates $5.4 million in tax revenue.

University System of Maryland

- For every state tax dollar spent on the University System of Maryland , the system generates $7.70 total spending in the state economy.
- The system spent $1.9 billion in FY 97 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- The university system has 22,000 employees.
- The University System of Maryland generated about $671 million in state tax revenue in 1992.

For more information, see *The Smart Investment. The Economic Value of the University of Maryland System to the State of Maryland. 1994.*

Massachusetts Institute of Technology

- In FY 95, MIT initiatives and programs resulted in a $59 million economic contribution to the Cambridge community.
- MIT is Cambridge's third largest taxpayer, generating $3.1 million annually in real estate revenue.
- MIT's Cambridge first purchase policy resulted in over 100,000 purchase transactions in 1995 with over 700 Cambridge companies, amounting to $42 million.

LONG-TERM IMPACTS

- 4,000 companies founded by MIT graduates and faculty employ 1.1 million people and have annual world sales of $232 billion.
- MIT-related companies have more than 8,500 plants and offices in 50 states.
- The states benefiting most from MIT-related jobs are California (162,000), Massachusetts (125,000), and Texas (84,000).
- The 1,065 MIT-related firms headquartered in Massachusetts employ 353,000 people worldwide and generate worldwide sales of $53 billion.

For more information, see *MIT: The Impact of Innovation. 1997.*

University of Massachusetts

- For every state tax dollar spent on UMass, the university generates $8 total spending in the state economy.
- The total annual economic impact of UMass on Massachusetts is about $3.5 billion.
- The university spent $1.4 billion in 1995 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- UMass employees spent $505 million.
- Students spent $211 million.
- The university has 13,000 employees.
- The university's presence in the state generates an additional 12,700 jobs.

LONG-TERM IMPACTS

- Because of their earning power, the university's alumni add at least $2 billion to the state's economy every year.
- The university is fostering the growth of new companies.

Making a Difference

Rutgers' SpeakEZ Connection

SpeakEZ is a New Jersey company that uses speaker-identification and voice-recognition software developed by Richard Mammone, a Rutgers professor of electrical engineering and a member of Rutgers' Center for Computer Aids for Industrial Productivity (CAIP). His technology was developed under government contracts to the CAIP Center. SpeakEZ has been working with banks, credit card companies, and the Immigration and Naturalization Service to develop applications for voice-recognition systems. In 1995, SpeakEZ was acquired by T-NETIX, Inc, a leading provider of fraud-prevention and automated call processing services used by AT&T and regional Bell operating companies.

new technologies, and new products in Massachusetts.

- UMass is helping existing companies retain their competitive edge.

For more information, see *The Economic Impact of the University of Massachusetts, November 1996.*

University of Massachusetts Amherst

- For every state tax dollar spent on UMass Amherst, the university generates $9.08 total spending in the state economy.
- UMass Amherst brings more than $1 billion in total economic activity to its home regions.
- The university spent $452 million in 1995 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $185 million.
- Students spent $150 million.
- Visitors added $10 million.
- The university has 5,000 employees.
- The university's presence in the state generates an additional 5,000 jobs.
- UMass Amherst generated about $15 million in tax revenue.

LONG-TERM IMPACTS

- More than three dozen companies employing nearly 1,000 persons and generating more than $100 million in annual revenue have evolved from university research.
- Almost 60 percent of UMass Amherst's 130,000 alumni remain in Massachusetts, providing lifelong contributions to the state's economy. These graduates add more than $1 billion to the state's economy each year.

For more information, see *Impact: Increasing the Common Wealth. The Economic Impact of UMass Amherst, 1996.*

University of New Hampshire

- For every state tax dollar spent on UNH, the university generates $3.28 total spending in the state economy.
- The university spent $255 million in 1996 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $83 million.
- Students spent $15 million.
- Visitors added $9.5 million.
- The university has 2,740 employees.
- The university's presence in the state generates an additional 2,460 jobs.
- UNH generated about $5 million in state tax revenue.

New Jersey Institute of Technology

- Research expenditures reached an estimated $28.9 million in FY 96.
- Total expenditures by NJIT were over $141 million.

LONG-TERM IMPACTS

- By introducing new technologies into manufacturing and services, NJIT is helping New Jersey's industries to compete and to create entirely new technology-intensive industries.
- NJIT received a $12 million award from the National Institute for Standards and Technology to establish the New Jersey Manufacturing Extension Partnership. MEP will provide small and medium-sized businesses in the state direct technical business assistance to help them improve their competitiveness.

For more information, see *Report from the President, 1995–1996.*

State University of New York

- For every state tax dollar spent on the State University of New York, the university generates $5.10 total spending in the state economy.
- In 1993-94, approximately $10.4 billion of New York State's economy was a direct result of spending by SUNY, its students, employees, and visitors.
- The university spent $4.01 billion in FY 94 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $2.5 billion.
- Students spent $2.6 billion.
- Visitors added $121 million.

- The university has 80,384 employees.
- The university's presence in the state generates an additional 35,106 jobs.
- The SUNY system generated about $1.1 billion in tax revenue.
- SUNY brought in $1.2 billion in out-of-state dollars to New York.

LONG-TERM IMPACTS

- Each year, SUNY graduates add an estimated $16.8 billion to New York's economy through increased personal earning power.
- The Small Business Development Center has counseled over 68,000 people interested in starting a small business, helped them acquire $483 million in private and public funding, and created 28,572 jobs in New York.

For more information, see *A Return on Your Investment, The Economic Impact of SUNY on New York State*

The Pennsylvania State University

- The university spent $1.7 billion in 1995–96 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $533 million.
- Students spent $885 million.
- Visitors spent $98 million.
- The university has 25,900 employees.
- The university's presence has created another 73,000 jobs.
- The university generated about $91 million in taxes.

LONG-TERM IMPACTS

- Penn State educates one of every eight college students in Pennsylvania.
- The university's Cooperative Extension programs serve one in six Pennsylvania households annually.
- Penn State's technology transfer initiatives include PENNTAP, Ben Franklin Partnership activities, the Bioprocessing Resource Center and the Penn State Research Park.

For more information, see *Penn State 1997–98 Budget Presentation.*

University of Pittsburgh

- For every state tax dollar spent on the University of Pittsburgh, the university generates $5.70 total spending in the state economy.
- In 1992, the business volume in Allegheny County attributable to the university totaled about $879 million.
- The university spent $162 million in 1994 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $197 million.
- Students spent $139 million.
- Visitors spent $12 million.
- The university has 8,800 employees.
- The university's presence has created another 16,900 jobs.
- The university generated about $65.8 million in taxes.

LONG-TERM IMPACTS

- Pitt is actively involved in procuring goods and services from minority and women's business enterprises. In 1992, the university spent $17 million contracting with minority and women's businesses.
- University programs and events generated hundreds of millions of dollars for the local economy by attracting money from outside the region. The university continues to forge dynamic partnerships with industry, government, and health care agencies aimed at improving the region's long-term economic forecast.
- Pitt's R&D activities nurture Pittsburgh's high-technology base and promote technology transfer, leading to innovation that improves the quality of life in the region.
- The university's research and technical assistance efforts include the manufacturing Assistance Center, centers and institutes at the Joseph M. Katz Graduate School of Business, and the Mid-Atlantic Technology Applications Center.
- About 37 percent of all college graduates in Allegheny County are Pitt alumni.

For more information, see *The University of Pittsburgh's Impact on the Community, 1994.*

University of Rhode Island

- For every state tax dollar spent on URI, the university generates $4 total spending in the state economy.

- The university spent $276 million in 1997 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $82.2 million.
- Students spent $19 million in 1996.
- Visitors spent $1.7 million in 1996.
- The university has 2,400 employees.
- The university's presence has created another 9,000 jobs.

LONG-TERM IMPACTS

- In 1992, URI ranked 15th in the nation among research institutions receiving environmental research funds. Many of the university's research projects directly benefit the state—from the impact of beach erosion to the study of Lyme disease, to turfgrass research.
- Other important areas of research include water quality and pollution monitoring, pharmaceuticals, family violence, climate change, cancer prevention, robotics, and coastal and environmental management.

For more information, see *Extraordinary Returns, An Overview of URIs Impact on the Rhode Island Economy, February 1994.*

Rutgers, The State University of New Jersey

- For every state tax dollar spent on Rutgers University, the university generates $5 total spending in the state economy.
- In FY 93, the university had a total economic impact on the state of $2.06 billion.
- The university spent $827 million on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $272 million.
- Students spent $274 million.
- Visitors added $8.3 million.
- The university has 21,693 employees.
- The university's presence in the state generates an additional 7,626 jobs.
- Rutgers University generated about $46 million in tax revenue.

LONG-TERM IMPACTS

- From 1983 to 1993, Rutgers more than quadrupled its non-state research support, from $25.3 million to $113.4 million.
- Through its Advanced Technology Centers, Rutgers generates research that supports New Jersey industries.
- Rutgers confers about 9,000 degrees each year. A majority of these graduates stay in New Jersey and contribute to the state's economy.
- Between 1989 and 1993, Rutgers Office of Corporate Liaison and Technology Transfer disclosed over 240 inventions. During this time, the income from royalties on Rutgers-related patents was about $10 million.

For more information, see *Return on Investment: The Economic Benefits of Rutgers University to the Citizens of New Jersey, 1994.*

University at Stony Brook, SUNY

- For every state tax dollar spent on the University at Stony Brook, the university generates $2 in non-state funds.
- The University at Stony Brook has a regional economic impact of $2.25 billion a year on its region.
- The university spent $721 million in 1993–94 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $290 million.
- Students spent $40 million.
- The university has 10,000 employees.
- The university's presence in the state generates an additional 13,100 jobs.

LONG-TERM IMPACTS

- Stony Brook's role as a major research university has prompted the creation of targeted economic development programs. These have assisted hundreds of companies, entrepreneurs, and small business owners. The programs served a combined total of 1,047 companies and prospective small business owners in FY 94–95.
- Targeted economic development programs generate corporate revenues projected to exceed $150 million.

- Corporate partners and entrepreneurs invested $80 million in development efforts, which saved or created more than 2,000 jobs.

For more information, see *The University at Stony Brook's Regional Economic Impact, 1995.*

Temple University

- For every state tax dollar spent on Temple University, the university generates $12 total spending in the state economy.
- Temple University had a total economic impact on Pennsylvania of $1.7 billion in 1996.
- The university spent $491 million on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $253 million.
- Students spent $228 million.
- The university has 8,841 employees.
- The university's presence has created another 23,378 jobs.
- The university generated about $22 million in taxes.

Towson University

- For every tax dollar spent on Towson, the university generates $9.72 total spending in the state economy.
- The university spent $68.5 million in 1996 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- Towson employees spent $26.8 million.
- Students spent $16.8 million.
- Visitors spent $6.7 million.
- The university has 2045 employees.
- The university's presence in the state generates an additional 8,300 jobs.
- Towson generates about $63 million in tax revenues.

University of Vermont

- For every state tax dollar spent on the University of Vermont, the university generates $11.50 total spending in the state economy.
- The university spent $268 million in FY 97 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $77 million.
- Students spent $43 million.
- Visitors spent $1 million.
- The university has 3,079 employees.
- The university generated about $7 million in taxes.

West Virginia State College

- For every state tax dollar spent on the West Virginia State College, the college generates $5.05 total spending in the state economy.
- West Virginia State's total monetary impact on the local economy was $54.2 million in 1994–95.
- West Virginia State spent $24.3 million on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- The college's employees spent $12.3 million.
- Students spent $5.8 million.
- Visitors spent $2.2 million.
- The university has 500 employees.
- The university's presence has created another 3,720 jobs.
- The university generated about $33 million in local taxes in FY 92.

For more information, see *The Impact of West Virginia State College on the Kanawha Valley.*

Making a Difference

CUNY in Sequins

In his battle to win market share from manufacturers in India and China, Lawrence Gladstone, CEO of Sequins International, the largest maker of sequins in the world, turned to CUNY's Urban Center for Economic Development at LaGuardia Community College. Since early 1995, the Center has been running workshops for the 300 employees of Sequins International's Queens, N.Y., plant on the Total Quality Management (TQM) approach to business. The company has seen major improvements in productivity and customer satisfaction. TQM is the cornerstone of a business consulting service offered by the Center.

The Southeast

University of Alabama

- For every $1 the state invests in the University of Alabama, the university generates $3 dollars in total spending in the state's economy.
- The university employs 3,400 people and generates an additional 2,250 jobs.
- UA employees paid $13.6 million in state taxes in 1996.
- The university spent $280 million in the state in 1996.
- Employees spent $102.5 million and students spent $128.5 million in Tuscaloosa County.
- Overall, UA had a total economic impact on Tuscaloosa County of $595 million.

LONG-TERM IMPACTS

- Over a lifetime, the average added value of a 1995 UA bachelor's degree is $409,000 in 1995 dollars.
- Overall, 1995 graduates will earn $1.7 billion more in their lifetimes than they would have without college.
- Thanks to taxes paid by graduates, the state will reap a 7.3 percent annual rate of return on its investment in UA students.

For more information, see *The Economic Impacts of the University of Alabama, January 1997.*

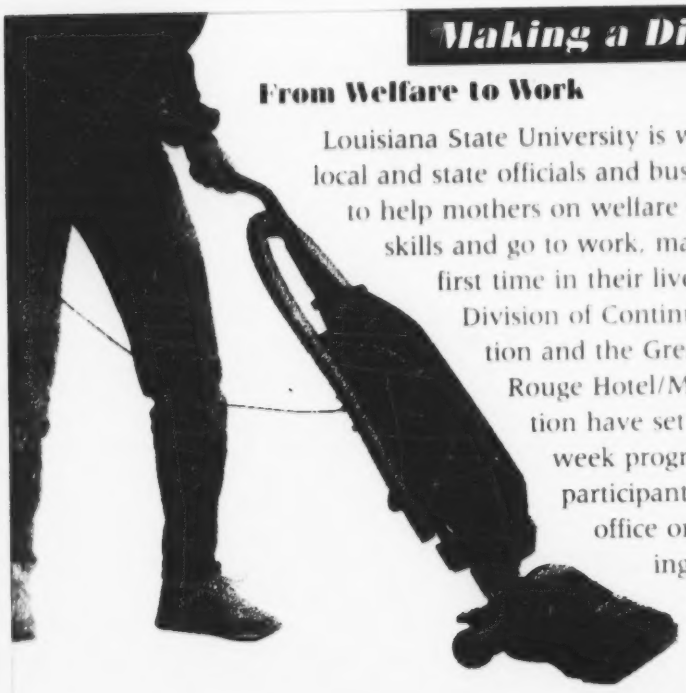
University of Alabama at Birmingham

- UAB generated local business volume of $1.55 billion in 1995.
- The university employs 15,500 people.
- Its presence generated an additional 47,959 jobs.
- Total expenditures of UAB faculty and staff, students, and visitors in the state reached $637 million.
- UAB generated $54 million in tax revenue.

For more information, see *The Economic Impact of the University of Alabama at Birmingham on The Birmingham Metropolitan Area (FY 95).*

Making a Difference

From Welfare to Work



Louisiana State University is working with local and state officials and business people to help mothers on welfare learn job skills and go to work, many for the first time in their lives. The LSU Division of Continuing Education and the Greater Baton Rouge Hotel/Motel Association have set up a 12-week program to train participants for front-office or housekeeping entry-level positions. The program consists of classroom instruction combined with hands-on training and internships at area hotels. The hotel/motel association maintains a job-placement service for graduates to help them find work, then follows up on the students for the next three months. The first group of 25 welfare recipients graduated in April 1997.

University of Alabama in Huntsville

- In 1996, the university generated more than $205 million total spending in the state's economy.
- The university spent $91.7 million on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent almost $33 million in the local economy.
- Students spent more than $30 million.
- Visitors added another $1.5 million.
- The university employs 983 people.
- Its presence in the state has generated an additional 2,229 jobs.
- The university generated $1.4 million in tax revenue.

Auburn University

- In FY 93–94, $162 million in state appropriations for Auburn yielded an expenditure impact of $446 million in the state.
- The university employed 9,333 people full and part-time, and generated an additional 18,859 jobs by stimulating Alabama's economy.
- AU employees spent more than $147 million dollars in Alabama in FY 93–94, with students spending more than $140 million, and visitors spending more than $24 million.
- The university's in-state expenditures stimulated overall economic output by $940 million.

LONG-TERM IMPACTS

- A bachelor's degree at AU increased the expected lifetime earnings of its 1993-94 graduates by some $1.3 billion.
- Research at the university generated $168 million in productivity support in the state.
- The Auburn Industrial Extension Service provided help to over 300 Alabama manufacturers in its first year of operation.

For more information, see *Auburn University System Economic Impacts on Alabama, April 1996.*

University of Arkansas

- Every state dollar invested in the university generates $2.35 dollars total spending in the state economy.
- The university, its employees, students, and visitors spent $280 million in the state in FY 95–96.
- The university employees more than 4,000 people directly.
- The university generates 16,500 additional jobs.

LONG-TERM IMPACTS

- The College of Business Administration and Wal-Mart are working together in the Support Arkansas Made program, helping small local manufacturers compete by improving or strengthening their business ventures.
- UA social work students and faculty are helping improve the quality of the state's child welfare resources.

University of Arkansas System (University of Arkansas for Medical Sciences)

- UAMS's total gross economic impact on the state exceeded $1.2 billion in FY 95.
- UAMS has an annual payroll of $187 million.
- UAMS employs about 7,000 people.
- In the 1990s, UAMS had a job growth rate that was double the state job growth. UAMS also nearly doubled the annual wage income growth.

LONG-TERM IMPACTS

- The average starting salary of a family physician graduating from UAMS is $83,600, nearly five times the state per capita income. These salaries build the economy through income, property, sales, and other taxes.
- UAMS's Biomedical Biotechnology Center is aiding the growth of the biotechnology industry in the state.

University of Central Florida

- For every state dollar invested in the university, UCF generates $4 total spending in the state economy.

- UCF's total contribution to the Central Florida economy exceeds a half billion dollars annually.
- The university spent $262 million in 1996 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- UCF employees spent $72 million in the local economy.
- Students spent $334 million in the local economy.
- Visitors added another $42.4 million.
- UCF employs 2,877 people.
- The university's presence generates another 10,000 jobs.
- The university generated $32.5 million in tax revenue in 1996.

LONG-TERM IMPACTS

- The increasing number of local executives, professionals, and civic leaders who are UCF alumni are helping the region realize its economic potential.
- UCF is a major attraction for many of the high-tech and Fortune 500 companies that have located in central Florida.
- The UCF-established Central Florida Research Park houses firms providing more than 5,000 jobs that pay on average $20,000 more annually than Orlando's median household income.
- The 50,000 UCF alumni living in mid-Florida will add $30 billion more to the regional economy over their lives than they would have if their education had ended at high school.

For more information, see *The Economic Impact of the University of Central Florida.*

East Carolina University

- East Carolina University generates more than $818 million in the local economy.
- ECU is responsible for nearly 23,000 jobs in Pitt County, nearly 42.3 percent of total employment in the county.
- Construction projects at ECU are generating $125.4 million in goods and services, $41 million in additional earnings, and 2,818 jobs in the local economy.
- The university payroll is $131.4 million. These payroll dollars spin off the purchase of $241 million in additional goods and services and support 6,400 jobs and almost $75 million in additional salaries and earnings.
- Overall, the total dollars spent by students within Pitt County exceed $158 million. This spending generates 7,621 additional jobs, and $89.3 million in additional salaries and earnings.

For more information, see *Regional Development Impact: A Study of East Carolina University.*

University of Florida

- For every state dollar invested in the university, UF generates $5 total spending in the state economy.
- The total annual impact of UF on the state economy in FY 93–94 was $2.1 billion.
- The university spent $625 million on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- UF employees spent $986 million in the local economy.
- Students spent $263.3 million in the local economy.
- Visitors added another $19 million.
- UF employs 37,559 people.
- The university's presence generates another 10,360 jobs.
- UF was awarded $193 million for sponsored research, most of which came from outside the state.

LONG-TERM IMPACTS

- About 139,000 UF alumni live and work in Florida.
- In 1993, UF ranked third nationally among public and private universities in the number of patents awarded.
- In 1993, UF was ranked fifth among public universities in the amount of royalty income received from patents issued.

For more information, see *The Economic Impact of the University of Florida on the State of Florida, 1995.*

Florida A&M University

- Every state dollar invested in the university generates $6.40 total spending in the state economy.
- The university spent $174 million in FY 94–95 on supplies, equipment, acquisition,

maintenance, and other institutional expenses.

- FAMU employees spent $42 million in the local economy.
- Students spent $70 million in the local economy.
- Visitors added another $25 million.
- FAMU employed 1,516 people.
- The university's presence generated another 5,863 jobs.

For more information, see *Florida A&M University Economic Impact Study Operating Budget 1994–95.*

Florida Atlantic University

- For every state dollar invested in the university, FAU generates $9.98 total spending in the state economy.
- The total economic impact of FAU on Southeast Florida for FY 94-95 was $1.1 billion.
- The university spent $213 million in FY 94–95 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- FAU employees spent $94.5 million in the local economy in 1995.
- Students spent $97.8 million in the local economy.
- FAU employed 2,060 people in 1992.
- In 1995, the university generated $11.8 million in tax revenue.

LONG-TERM IMPACTS

- The "value added" earning power that a FAU degree gives its graduates will contribute an additional $59.7 million to the Southeast Florida economy.
- Increases in education levels in the state lead to lower unemployment, less crime, and less poverty.
- FAU contributes public service to the community through cultural events, sports, public speakers, volunteers on community boards, etc.

For more information, see *Florida Atlantic University 1994-95 Economic Impact Study.*

Florida State University

- For every state dollar invested in the university, FSU generates $1.47 dollars total spending in the state economy.
- The university spent $415 million in FY 93–94 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- FSU employees spent $101.6 million in the local economy.
- Students spent $266.3 million in the local economy.
- Visitors added another $32 million.
- FSU employs 13,100 people.
- The university's presence generates another 7,200 jobs.
- Overall, FSU generated directly and indirectly over $285 million in gross wages in Leon County.
- The university generated $45.5 million in tax revenue.

LONG-TERM IMPACTS

- As the result of the education received at FSU, the Fall 1993 entering class can be expected to add over $4.44 billion to the overall income stream in Florida over their working lifetimes.

For more information, see *Florida State University and the State of Florida, April 1996* and *The Economic Impact of Florida State University on the Leon County Region, December 1995.*

University of Georgia

- The university spent $795 million in 1997 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- UGA employs 15,522 people.
- UGA's Georgia Center for Continuing Education had a total economic impact of more than $20 million on the region in FY 94–95. It created almost 800 jobs, and was responsible for $14 million of personal income for local individuals.

For more information, see *Economic Impacts of The Georgia Center for Continuing Education on the Athens/Clarke County and Greater Community, 1996.*

Georgia State University

- The total annual impact of GSU on the Atlanta economy in FY 92 was $286 million.
- The university spent $40 million on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- GSU employees spent $55 million in the local economy.
- Students spent $93.5 million in the local economy.
- GSU employs 2,257 people.

- The university's presence generates another 3,928 jobs.
- GSU generated $18.9 million in tax revenue.

For more information, see *Georgia State University Spending Patterns and the Atlanta Economy, 1993.*

University of Houston System

- For every state tax dollar spent on the University of Houston System, the system generates $3.3 total spending in the state economy.
- The system spent $346.2 million in FY 96 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- System employees spent $48.9 million.
- Students spent $13.3 million.
- The system has 8,300 employees.
- The university's presence has created another 12,063 jobs.
- The university generated about $37.1 million in taxes.

University of Houston

- For every state tax dollar spent on the University of Houston, the university generates $2.30 total spending in the state economy.
- UH contributes both directly and indirectly $509 million to the Greater Houston economy.
- The university spent $314 million in 1996 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $48.9 million.
- Students spent $61.7 million.
- The university has 8,300 employees.
- The university's presence has created another 12,063 jobs.

LONG-TERM IMPACTS

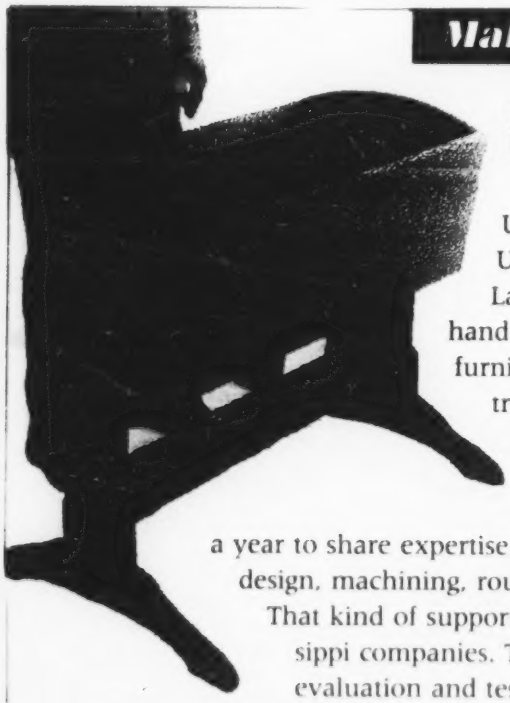
- Consulting programs of the Small Business Development Center in FY 96 assisted in producing more than $323 million in new sales for Texas Gulf Coast clients, whose businesses generated 2,400 new jobs and $20.4 million in additional taxes.
- UH provides the region with a large pool of young and well-educated professionals. This supply of skilled labor is a major attraction for companies locating to Houston.
- The estimated 27,696 alumni living in Harris County will earn $16.6 billion more during their lifetimes than they would as high school graduates. They support the local economy by paying taxes, buying houses and goods, and enriching the region's labor force.

For more information, see *University of Houston, Economic Impact on the Greater Houston Area, FY 1996.*

University of Kentucky

- Each $1 of state support of higher education in Kentucky results in $3.40 of total spending in the state economy.
- The $672 million in state appropriations for UK in FY 91–92 stimulated $2.29 billion in total public and private spending in the state.

Making a Difference



Hands On Help for Furniture Makers

The Furniture Research Unit of the Mississippi State University Forest Products Laboratory works hand-in-hand with Northeast Mississippi's furniture manufacturing industry helping improve profits. Faculty from the research unit of the lab make about 200 plant site visits a year to share expertise on topics such as frame design, machining, rough mill design, and so on. That kind of support is provided free to Mississippi companies. The unit also offers a frame evaluation and testing service on campus.

- Total employment in the state was 67,862 greater than it would otherwise have been in the absence of state support for higher education.
- UK spent $1.1 billion in FY 96–97 on supplies, equipment, acquisition, and other institutional expenses.
- The university employs 12,800 people full-time.
- Externally supported research at UK led to approximately 3,000 jobs in Kentucky in FY 95–96.
- Research from out-of-state sources contributed about $148 million in total output to the Kentucky economy.

LONG-TERM IMPACTS

- Higher education substantially increases a person's life-time earnings.
- The human capital value of the persons enrolled in the state's university system was increased by $8.52 billion as a result of adding a year of higher education to their education.

For more information, see *Two Studies: Economic Impact of Public Higher Education in Kentucky.*

Louisiana State University

- LSU spent $312 million in 1996–97 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- LSU employees spent $167 million.
- The university has 6,451 employees.

University of Louisville

- Every tax dollar spent on U of L and other state universities returns $3.40 to the state economy.
- The university spends more than $335 million a year for goods and services.
- U of L has an $160 million payroll.
- U of L employees pay more than $13 million a year in state and local income and sales taxes.
- The university is one of Louisville's top ten employers, with over 4,000 faculty and staff.
- U of L's supporters have invested more than $157 million in U of Ls endowment.

LONG-TERM IMPACTS

- A bachelor's degree raises lifetime earnings by $200,000 over a high school diploma—$300,000 for a master's degree.
- The majority of U of L's graduates remain in the area, becoming productive members of society, earning more and contributing to the standard of living in Kentucky.
- U of L provides rapid prototyping services to industry, cutting engineering time for products to reach the marketplace.

For more information, see *U of L Impact on Economic Development.*

University of Memphis

- For every state tax dollar spent on the University of Memphis, the university generates $10.57 total spending in the state economy.
- The university had a total economic impact on the state of more than $1 billion in 1996–97.
- The university spent $79.8 million in 1996–97 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $112.4 million.
- Students spent $189.2 million.
- Visitors spent $14.4 million.
- The university has 2,505 employees.
- The university's presence has created another 10,218 jobs.
- The university generated about $65.8 million in taxes.

For more information, see *The Economic Impact of the University of Memphis: Faculty and Staff Survey, Student Survey.*

University of Mississippi

- The university spent $146.4 million in 1996–97 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $142 million.
- Visitors added $23 million.
- The university has 2,000 employees.
- In 1995–96, the university's research, teaching, and service activities on its Oxford and

Jackson campuses attracted $45.8 million from sources other than the state's annual appropriation.

- The university's sponsored program expenditures translates into almost 2,000 Mississippi jobs.

LONG-TERM IMPACTS

- Ole Miss researchers enhance the state's economy through research in pharmaceutical and health-related sciences, discovering new drugs and licensing them.
- The university's National Center for the Development of Natural Products has enabled researchers to intensify their efforts to isolate and develop new drugs and agrichemicals from natural sources such as plants, microorganisms, and marine life.
- The university promotes economic development through the Mississippi Small Business Development Center network at Ole Miss. In 1994, the SBDC network assisted 5,163 clients and helped them obtain $74.8 million in investment capital. The network also helped state business owners create more than 3,000 jobs and retain 4,600 others.

For more information, see *Economic Impact: 1997*.

Mississippi State University

- For every state tax dollar spent on Mississippi State University, the university generates $2.18 total spending in the state economy.
- The university spent $347 million in FY 96 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $101.6 million.
- Students spent $52 million.
- Visitors added $22 million.
- The university has 4,000 employees.
- The university's presence in the state generates an additional 3,200 jobs.
- Mississippi State University generated about $11 million in tax revenue.

LONG-TERM IMPACTS

- Mississippi State researchers reduced the time it takes to identify a virus that is a major problem for the state's poultry industry, costing the industry about $1.7 million each year.
- The university is home to a one-stop referral center that helps business and industry seeking university expertise.
- Mississippi State works with all aspects of the timber industry, which accounts for more than 57,000 jobs and nearly 25 percent of the wages paid in the state.
- The Food and Fiber Center of the Cooperative Extension Service assists new and expanding Mississippi businesses with economic analysis, product development, and regulatory compliance.

For more information, see *Mississippi Small Business Development Center Annual Report 1996*.

University of New Orleans

- UNO spent $115 million in 1994 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- UNO employees spent $67 million.
- Out-of-town students at UNO spent $19 million.
- Visitors spent $2.4 million.
- The university has 2,055 employees, and its presence in the state generates an additional 1,255 jobs.
- UNO generates about $5.5 million in tax revenue.

LONG-TERM IMPACTS

- The Technology Enterprise Center and Business Incubator is impacting the New Orleans economy by upwards of $25 million.
- A new Maritime Technology Center of Excellence will improve shipbuilding processes in the region.
- The UNO Research and Technology Park, a complex of research centers designed to bring together the common needs of academic, government, and corporate research, is underway.

University of North Carolina at Chapel Hill

- For every state tax dollar spent on UNC Chapel Hill, the university generates $4 total spending in the state economy.

- In FY 94, the university had a total economic impact on the state of $1.2 billion.
- The university spent $139.6 million in FY 90 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $231 million.
- Students spent $6.9 million.
- Visitors added $11.3 million.
- The university has 8,883 employees.
- The university's presence in the state generated an additional 15,727 jobs in 1994.
- UNC generated about $23 million in state income tax revenue.

LONG-TERM IMPACTS

- Almost 8 percent of all business managers and administrators studied at UNC-CH. Eleven percent of technicians studied at UNC-CH.
- UNC-CH is the university of choice within the state's business community. 26.1 percent of business owners, plant managers, and CEOs surveyed by UNC-CH indicated they were UNC-CH alumni.

For more information, see *Impact Carolina, 1992*.

North Carolina A&T State University

- For every state tax dollar spent on North Carolina A&T, the university generates $3.14 total spending in the state economy.
- Overall, North Carolina A&T generates $145.1 million in earnings for North Carolina households.
- The university spent $21.1 million in FY 94-95 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $37.6 million.
- Students spent $74.5 million.
- Visitors added $16.5 million.
- The university has 1,565 employees.
- The university's presence in the state generates an additional 4,575 jobs.
- The university generated about $13 million in tax revenue.

LONG-TERM IMPACTS

- The university is a direct and important contributor to the continued improvement of the productivity of workers in its region.
- There are significant technology transfers from programs in the Schools of Agriculture, Technology, and Business Administration and College of Engineering to local industries.
- The university collaborates with government agencies and local industry to initiate economic development and research programs in its region and in the state of North Carolina.
- The university helps agencies in the local community to obtain funds for numerous social research and development programs.

For more information, see *The Economic Impact of A&T State University, 1995*.

North Carolina State University

- For every state tax dollar spent on NC State University, the university generates $3 total spending in the state economy.
- In FY 93, the university had a total economic impact on the state of $1.9 billion.
- The university spent $195 million in FY 93 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $235 million.
- Students spent $209 million.
- Visitors added $31.2 million.
- The university has 13,200 employees.
- The university's presence in the state generates an additional 5,800 jobs.
- NC State University generated about $80 million in tax revenue.

University of North Carolina at Greensboro

- For every state tax dollar spent on UNC Greensboro, the university generates $1.83 total spending in the state economy.
- The university spent $120 million in FY 92–93 on supplies, equipment, acquisition,

maintenance, and other institutional expenses.
- University employees spent $62.7 million.
- Students spent $50.5 million.
- Visitors added $2 million.
- The university has 1,738 employees.
- The university's presence in the state generates an additional 6,812 jobs.
- The university generated about $3.8 million in tax revenue.

University of North Texas

- The University of North Texas spent $269.7 million in 1998 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- The university has 3,465 employees.

LONG-TERM IMPACTS

- The University of North Texas College of Business Administration provides consulting, research, and educational programs for business professionals in the oil and gas industry. The institute was established by an endowment from six major oil and gas companies.
- The university's Interdisciplinary Center for the Study of Work Teams provides consulting to business professionals about self-managed work teams.
- The university's Professional Development Institute provides continuing professional education in accounting, auditing, tax finance, and personal and professional management. The institute has trained more than 45,000 people since 1973.
- The university is one of the largest centers of instructional computing in the nation.

For more information, see *Serving the People, The Economic Impact of Higher Education in the Region, 1994.*

Prairie View A&M University

- The university had a total economic impact on the state of more than $54.8 million in FY 96.
- The university spent $77.4 million on supplies, equipmentit, acquisition, maintenance, and other institutional expenses.
- University employees spent $23.4 million.
- The university has 1,025 employees.

University of South Carolina

- For every state tax dollar spent on the University of South Carolina, the university generates $10 total spending in the state economy.
- The university spent $364 million in 1997–98 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- Student spending had an economic impact on the state of $564 million in 1991–92.
- The university's total economic impact on the state in 1991–92 was $1.2 billion.
- The university has 5,000 employees.

University of South Florida

- For every state dollar invested in the university, USF generates $3 total spending in the state economy.
- The total annual impact of USF on the local economy in 1994 was $1.1 billion.
- The university spent $425 million on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- USF employees spent $209 million in the local economy.
- Students spent $21 million in the local economy.
- Visitors added another $29.4 million.
- USF employs 9,900 people.
- The university's presence generates another 28,300 jobs
- In 1994, USF generated $67.7 million in tax revenue.

LONG-TERM IMPACTS

- USF's presence in the region has played a powerful role in generating activity among private research firms.

For more information, see *The Economic Impact of the University of South Florida, 1994.*

University of Southern Mississippi

- The university spent $131 million in 1997 on supplies, equipment, acquisition, maintenance, and other institutional expenses.

- The university has 2,114 employees.
- The university's presence in the state generates an additional 11,200 jobs.
- The USM generated about $78 million in payroll tax revenue.

University of Tennessee

- For every state tax dollar spent on the University of Tennessee, the university generates $3.00 total spending in the state economy.
- The university spent $996 million in 1998 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $418 million in 1992–93.
- Students spent $306 million.
- Visitors spent $98 million.
- The university has 18,096 employees.
- The university's presence generated an additional 23,000 jobs.
- The university generated about $43 million in taxes.

LONG-TERM IMPACTS

- Sponsored research totaled a record $150.8 million in 1992–93. The UT Research Corp received $5.5 million in royalties in the last 10 years, and $2.7 million has been passed along to inventors.
- Between 1985 and 1993, UT's Procurement Technical Assistance Program helped Tennessee industries obtain $405 million in prime and subcontracts.

For more information, see *Growing the State Economy: The University of Tennessee's Economic Impact on the Tennessee, 1995.*

Texas A&M University

- In 1996, the economic impact of Texas A&M University and other members of The Texas A&M University System in the Bryan-College Station region surpassed $600 million annually.
- The university's overall economic impact on the region is more than $1.5 billion a year.
- The university spent $648.6 million in 1997 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $420 million in 1996.
- Students spent $173 million.
- Visitors spent $29.3 million.
- The university has 19,850 employees.

University of Texas System

- In 1994, spending by the UT system and its students totaled $15.5 billion.
- The system created more than 159,000 jobs.
- The system's spending generated $8.73 billion in personal income in the state of Texas.
- The system attracted $2.9 billion in R&D funds.

Texas Tech University

- Every state tax dollar spent on Texas Tech and the Texas Tech Health Sciences Center generates $7.58 total economic impact in the West Texas economy.
- In FY 92, the total economic impact of Texas Tech and its Health Sciences Center on West Texas was $1.06 billion
- Texas Tech employees spent $69.2 million.
- Students spent $131.3 million.
- Visitors spent $12 million.
- The university has 7,248 employees.
- The university's presence has created another 33,234 jobs.

For more information, see *Texas Tech University Health Sciences Center Community Impact, 1992.*

Making a Difference

Focus on Lasers

More than a decade ago, Orlando's civic leaders, working with University of Central Florida and state officials, decided to focus on making the city a world center for electro-optic and laser research. City and University of Central Florida officials persuaded the state legislature to set aside recurring funds to found and operate a laser research center at UCF, and to assist startups in all phases of technical development. The result: Mid-Florida has emerged as one of the three top electro-optics center with more than 100 companies and thousands of employees.

University of Texas at Arlington

- In 1994, the University of Texas at Arlington generated $1.07 billion for the local economy.
- The university spent $159.9 million in 1997 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $65 million.
- Students spent $125.7 million.
- The university has 3,100 employees.

University of Texas at Austin

- For every state tax dollar spent on the University of Texas at Austin, the university generates $2.93 total spending in the state economy.
- In 1994, the university had an $3.66 billion economic on local economies throughout the state.
- The university spent $971.8 million in 1997 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- Students spent $453 million in 1994.
- The university has 19,800 employees.
- The university's presence has created another 26,773 jobs.

University of Virginia

- For every state tax dollar spent on the University of Virginia, the university generates $2.10 total spending in the state economy.
- The university spent $336.7 million in 1996–97 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $121.7 million in 1989–90.
- Students spent $76.7 million in 1996–97.
- Visitors spent $53.9 million in 1996–97.
- The university has 12,468 employees.
- In 1995–96, external support of research programs reached $141 million.
- The university generated about $18.2 million in taxes in 1989–90.

LONG-TERM IMPACTS

- The university's Research Park at North Fork is a resource for high-tech manufacturing and service companies.
- UVA is the top-ranked public research university in the country.
- UVA is actively involved in economic development efforts through the development of two research/business parks—Fontaine Avenue and North Fork. These parks have been initiators of economic growth in the region.
- As of 1995, the Central Virginia Small Business Development Center, housed by the university, had assisted 902 new businesses, created 160 jobs, saved or stabilized 507 jobs, and generated $6.2 million in new capital.

For more information, see *Higher Education Support for Economic Development. The Role of Piedmont Virginia Community College and the University of Virginia in the Thomas Jefferson Region, 1996.*

Virginia Commonwealth University

- VCU spent $925 million in FY 97 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $462 million
- Students spent $152 million in FY 94.
- Visitors spent $22 million in FY 92.
- The university has 13,703 employees.
- The university's presence has created another 11,600 jobs.
- The university generated about $33 million in local taxes in FY 92.

LONG-TERM IMPACTS

- New and expanding firms seek leading edge research and innovative thinking to improve products and services. In 1994–96, Virginia's public universities received nearly $600 million in research funding which supports the inquiry and testing that attract business.

- VCU serves as an information and resource broker for businesses and economic development professionals in the Central Virginia region. Through such efforts as the Virginia Biotechnology Research Park, the Information Systems Research Institute, the Virginia Real Estate Center and collaborative efforts between the School of Business and local industry, VCU contributes significantly to regional development efforts.

For more information, see *Virginia Commonwealth University: A Summary of the University's Local Economic Impact.*

Virginia Polytechnic Institute and State University

- Virginia Tech spent $567.3 million in 1996 on supplies, equipment, acquisition, maintenance, and other institutional expenses.
- University employees spent $179.4 million.
- Students spent $81 million in 1991.
- The university has 17,200 employees.
- The university's presence has created another 5,000 jobs.
- The university conducts in excess of $148 million annually in research.

LONG-TERM IMPACTS

- The Virginia Tech research program expends in excess of $4 million in annual payroll, providing more than 1,900 jobs.

For more information, see *Virginia Tech and the Community: A Summary of the University's Economic Effects, 1993.*

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* indicates an institution returned only a survey; its findings are included in the overall report data.

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